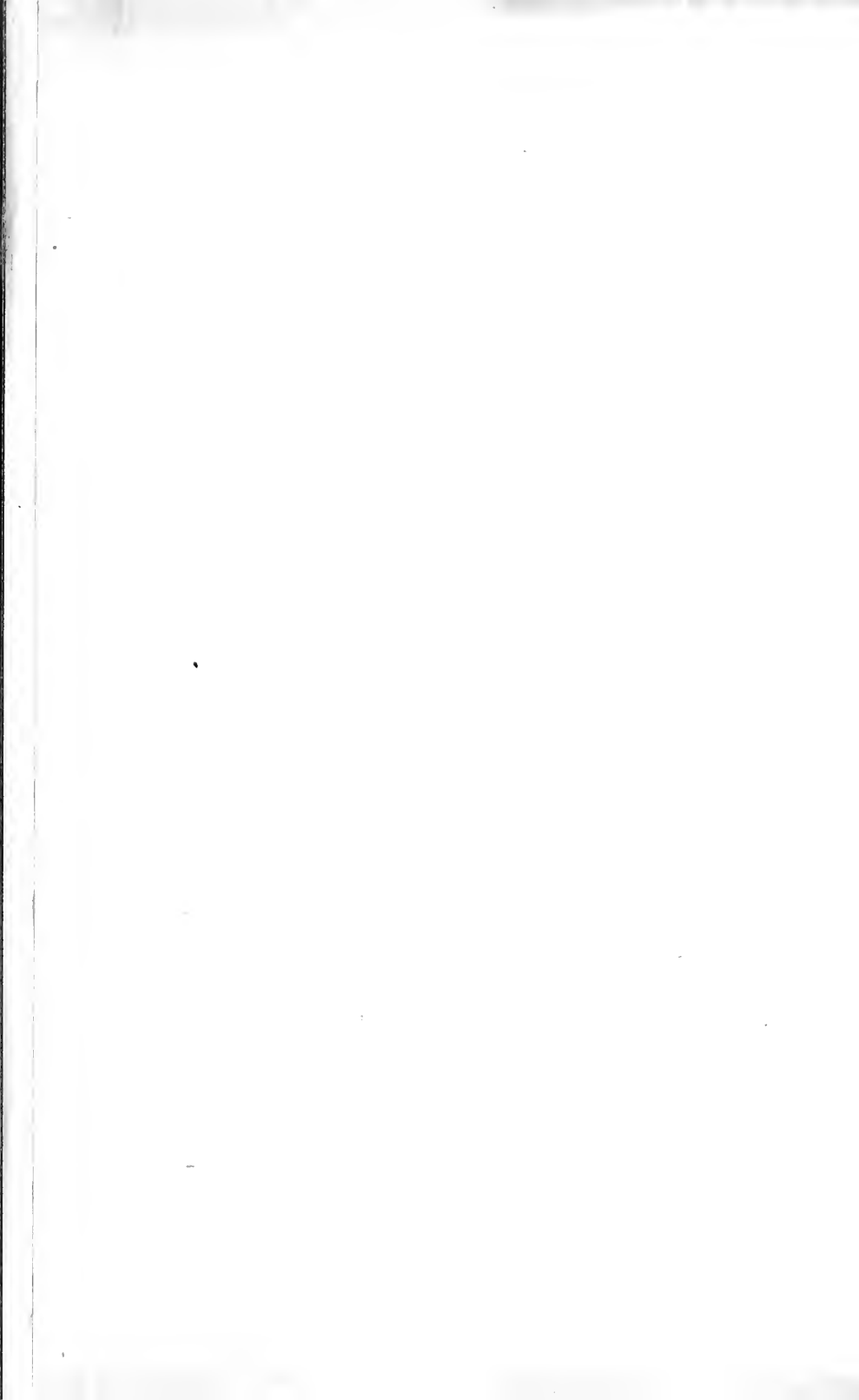


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MODERN BUSINESS

THE PRINCIPLES AND PRACTICE OF COMMERCE,
ACCOUNTS AND FINANCE

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ORGANIZATION CORRESPONDENCE TRANSPORTATION

PART I: BUSINESS ORGANIZATION

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MODERN BUSINESS VOLUME II

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EDITOR'S PREFACE

The three parts of this volume, entitled respectively "Business Organization," "Business Correspondence" and "Transportation," are all sections of one general subject—business structure and relations. Part I explains both the internal organization of a well-planned concern—the interdependent functions of departments and executive officers—and the general economic organization of society, in which each separate concern fills its own special place. This last-named kind of organization determines the general nature of the relations between any given concern and the rest of the business world.

The two connecting links of society and of business, by means of which most relations external to any concern are established, are communication and transportation. It is, therefore, fitting that the nature and efficient use of present-day facilities for communication and transportation should be discussed in this volume, thus covering the essential features of business relations.

The most important method of communication between business men is the written word. Business letters, designed to designate, to explain, to describe, to convince, to sell, constitute a powerful business force. Next in importance to correspondence as methods of communication are advertising and personal salesmanship, which might logically have been treated in this volume. Advertising and selling principles require such full discussion, however, and are applicable in so many

ways, that it was found better to defer these subjects until later in the course.

The most important method of transportation is the railroad, to which Professor Mavor devotes almost all his attention. His contribution to the literature of the subject is noteworthy and should be carefully studied by shippers, railroad men and law-makers.

JOSEPH FRENCH JOHNSON.

New York University.

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BUSINESS ORGANIZATION

PART I

CHAPTER I

DEVELOPMENT OF ORGANIZATION

1. *Organization, a logical arrangement of parts.*—A business organization is the machine by means of which the forces of industry make themselves effective. An efficient organization, like a good machine, must work with a minimum loss of energy. Every pound of steam uselessly dissipated must detract from the efficiency of the engine as a means of transport. The power that is to be directed by means of the locomotive engine should not be spent in carrying superfluous machinery and fuel, nor in climbing unnecessary grades, nor in overcoming needless friction. Likewise, a business organization which is to direct the power of capital and labor through a long process of production, should not permit a dissipation of energy. Through non-adaptability of the constructive form to the end in view, or through ignorance of the relations existing between different forms of business, the power of production is wasted. Many a business, by carrying surplus stock, by assembling goods under improper physical organization, and by running under needless friction due to poor management of labor, is wasting energy which should be realized in the profits.

As a machine is more easily explained when the nature

of the power which it is to control is understood, so the organization of any business is more readily understood if the forces which the organization is to direct are fully comprehended. Steam and electricity stand in the same relation to the present mechanical world that capital and labor do to the modern forms of business. In fact, we may say that a study of capital and labor has reference to the activities of industry, while a study of the organization pertains to the forms of business.

A history of industrial systems is a record of the growth of capital and the consequent division of labor. The interactions of these two forces of production are the cause of that industrial evolution which began with the simplest form—that of private production for private consumption, and which has developed into our present system of machine production for the world market.

2. *Early economic man.*—Each stage in this long development has had its own peculiar organization—the typical business enterprise—this being determined by the proportion of capital to labor and the degree of co-operation between these forces. The word “business” originally meant “being busy” in making a living, which the primitive man without tools was compelled to do with his bare hands. He was the first type of a “business” man in the original sense of the word. Bodily activity and insecurity were the main characteristics of such a life since each individual depended solely upon his own labor power to win from capricious nature the immediate necessities of life. He had no stock of tools nor food, nor in a word—capital—whereby he might make his labor power more effective, and thus secure that leisure which depends upon a surplus supply of the necessities of life.

The most primitive man, as we know him, wandered about with his companions, who had much the same degree of organization as a herd of cattle or a flock of sheep. The leading "business" man of such an aggregation had about the same function as the aggressive leader of the drove. Coöperation, which is the purpose of any organization, was absent in any economic sense, and only in the presence of danger did the horde display a knowledge of the advantages to be gained from combined effort.

Not until the family appears do we find a new motive for the coöperation of the individuals of the society. New motives alter conditions. Here for the first time men began to work together for the common purpose of making a living. This new organization based on economic activity still limited itself to securing "just enough" to live. It did not seek to add a surplus to this competence. The "household" was the unit of this industrial enterprise. A circle drawn about each family would have circumscribed all its activities. There were no interrelations with other families. The business undertakings of one household did not interfere with or influence those of the neighbors. That is to say, production was of the people, by the people, and for the people of each particular family.

The benefits of coöperation under this form of economic organization were soon displayed. The group discovered that it could win from nature not only a competence but something more. Within each community there was accumulated a stock of goods. This had the effect of giving the masters of the households more leisure. As the surplus increased there would be not only the disposition to exchange these goods for different kinds possessed by other households, but the possi-

bility for the master to let out any surplus labor force which might have resulted from a more efficient organization.

Movements are always slow in the beginning, but as soon as capital gained a lodging in the industrial systems the cumulative effect of numberless small increments was momentous. Small bits of capital planted and nurtured in thousands of families by this primitive co-operation began to swell and expand until the bands of these little isolated and exclusive industrial organizations were burst by the pressure, and the forces of production were liberated. Capital and labor flowed in many directions, seeking new levels, wearing new channels. Other lines of activity were furnished with fresh streams of power, and production was not only increased, but it resulted in varied forms of organization as well. Capital, thus freed, began to seek introduction to other households, and the laborer, more independent, sought to employ his skill by joining his services now to this household and now to that. The increase of capital in proportion to the labor force wrought an entire transformation of the family organization, since it allowed its members to step beyond its bounds and engage in new forms of independent activities.

3. *Influence of new economic activities.*—Under the family system there was no capital except in such auxiliary forms of production as the distaff, the handmill and the ax. The laborer was not free. He was tied to the land, and industrial skill was closely associated with the care of the soil. Furthermore, there was little or no commerce, as each group made all that it consumed. But when production increased to the extent that each group had a surplus, conditions were established whereby trade was sure to develop. This sur-

plus generally consisted of the prime necessities of life, such as articles of food and clothing. But under the isolated system of economy then existing there were no means whereby the surplus of one household could be exchanged for that of another. Household economy alternated between the extremes of want in one season and waste in another. This brought men to recognize the value of trading their surplus.

Commerce consists simply of the exchange of the surplus goods of one community for those of a different kind in another community. Therefore, before the industrial organization of the world could receive a new kind of enterprise in the form of commercial relations, there must first have existed the surplus wealth, the exchange of which constitutes commerce. So the growth of a stock of wealth not only transformed the relations of the members of the household to each other, but it changed the relationship existing between different households and finally the relations between localities to the nation as a whole. In time the interrelations of nations themselves became dependent upon this surplus wealth.

At present, however, we are concerned with the changes wrought in the business unit as represented by the family. It is necessary to keep in mind that a new economic activity has been created whose reaction upon the old methods of production must in a later period be treated almost as an independent cause in the shaping of economic organization. The itinerant workingman gradually acquired some surplus wealth of his own in the form of tools, and with this capital he was able to separate himself entirely from the family group and to set up for himself a permanent workshop. With the aid of increasing capital this class of men in time be-

came strong enough to effect a complete separation and to establish a new organization in industrial society. In their turn, these men became masters, not of agricultural laborers and estates, but masters of crafts and artisans.

4. *The town becomes a new economic unit.*—Under this system of industry the typical business unit was the “craft” or “trade.” The man who made things by hand was the “manufacturer,” but he possessed all the means necessary to that production in his own right. He owned the tools and the raw material, and by his own labor or under his direct supervision the article produced passed through all the stages of manufacture. The size of the representative firm under a system which compelled the master to be a skilled artisan, a shrewd financier, and an able salesman, but insisted on each article bearing the impress of his individual skill, must of necessity have been very small. That this type persisted so long and became so general throughout the fields of productive activity was due to the relatively small importance of the master’s capacity as a financier and sales manager as compared with his ability as a craftsman. The proportion of capital to labor power necessary for production was small. The master did, indeed, own the raw material in addition to his tools, but there was no need for great capital in either, as the variety of the articles demanded was limited by the customs and tastes of his own community which was still isolated and secluded even though it now embraced within its boundaries the “town” instead of the “family.” The growth of the economic unit which was now comprehended in the town meant also a great advance in the productive capacity of society and a corresponding increase of capital. Yet self sufficiency and isolation still kept com-

munities separated, and while one locality was suffering for the lack of some article, another would be greatly over-supplied with the same thing.

The town owed its development to the increased specialization of industry. The rise of the artisan class divided the field of production. The landowner still supplied the raw material, but the new class of artisans furnished the finished product. The latter found it desirable to congregate in small communities or towns, and while the conditions of the market did not demand that the artisan possess a large fixed capital in the form of extensive machinery, nevertheless there again appeared the advantages of social coöperation, and abundant movable capital accumulated in the hands of this new industrial class. Then, too, the presence of more wealth had the effect of changing the relations of members of this handicraft system. It furnished the basis for more specialization within the crafts themselves, and at the same time stimulated trade between the farm—the source of the raw material, and the town—the place of its manufacture.

Then there sprang up a class of men who saw an opportunity to equalize the economic disparities between localities. They devoted themselves to trade. Like the artisan class, these merchants furnished their own trading capital, captained their own ventures and supervised the marketing of their own goods. The business unit was small and the organization simple. But one must bear in mind that a new business enterprise becomes clearly differentiated. The peddler of the transition period, during which the industrial unit shifted from the family to the town, became a merchant. So by the end of the Middle Ages there were three distinct classes in Europe, each devoting its energies principally

to one branch of industry. The landowner in the country grew the raw material, the artisan in the town prepared it for the market, and the merchant, also of the town, assumed the risk of finding a purchaser. Yet it was in the hands of the manufacturer and the merchant that movable property accumulated fastest, and more especially was this true of the latter.

5. "*Town economy*" shows the benefits of association. —Although the conditions of production in agriculture were decidedly better, especially for the laborer, than before, and although an increased productivity supported a larger population and furnished a basis for the growing trade, still they failed to take on that development manifested in the towns. The artisans and the merchants, on the other hand, had long known the benefits to be derived from close association. Each class had been compelled in the absence of any other protection to form societies for self defense. Cut-throats in those days were not solely associated with business competition.¹ Later, however, the crafts and guilds, as these societies were called, adopted distinct business policies, and it is for this reason that we mention them. Tested by its policies, the nature of the guilds discloses itself in the following summary:

1. The basis of association was men, not capital, or division of profits. The men desired to regulate their particular business independently of other crafts.

2. The purpose was efficiency of workmanship and trustworthiness in products.

¹ "The *Victual Brothers* formed an organization modeled after that of the Knights Templars, for carrying on piracy; their motto was 'God's friend and all the world's enemy.' They had a stronghold at Gotland, in the Baltic Sea, and were long a terror to traders and fishermen; their power was broken in 1394 only by a fleet of thirty-five ships sent against them." —Clive Day, "A History of Commerce."

3. The conditions of membership included at first all who bought and sold, as well as all artisans; later they restricted themselves to professional craftsmen and merchants.

4. Insofar as the character of the regulations was concerned, in general, they promoted fraternal relations between members, fair dealing in the interests of the trade as a whole; and in a special way, they provided times and places for holding particular markets, passed upon the qualities of the goods, determined prices and decided upon methods of bargaining.¹

5. In regard to competition, all rivalry among members was denounced, while outside rivals—"foreigners," or persons from any other town, were permitted only to enter the town and sell their wares at wholesale. They could not purchase goods which the townspeople wanted for themselves.

6. In regard to the guild relation to the government of the town, burgership depended on guild membership, and at the height of power they secured a political domination. The king gave the inhabitants of some towns special privileges, which meant that the guilds secured monopoly of the trade and that prices were regulated by municipal laws. But this had to be given up, especially in the case of wheat, for high prices for this commodity induced an increase of supply. If the price was set too low for a staple ware, the ware was no longer offered. The government, finding it impossible to fix a price for bread, established the "assize of bread," a sliding scale by which the price and weight of a loaf was set by the market price of wheat. This system was applied to ale also and these assizes lasted until the Nineteenth Century in some places.

¹ Seager, "Introduction to the Study of Economics," page 6.

7. The staple handicraftsmen were the butchers, brokers, brewers, blacksmiths, masons, shoemakers, saddlers, carpenters, cabinet-makers, weavers, dyers, fullers, tailors, goldsmiths, coppersmiths, harness-makers, tanners and furriers.

6. *Comparative importance of labor and capital in the handicrafts system.*—The long endurance of this system of industry is accounted for by the small amount of capital necessary to enable a man to enter into a business on his own account. Not only the master's skill, but the power too, was furnished by man. The part that labor took in production was much greater than the part which capital furnished. But the same forces which burst the bonds that confined industry to the family, again broke through the limitations set by a local town economy. Circulating capital accumulated in the hands of some guilds faster than in others. It became evident, too, that certain individual members of the guilds were gathering to themselves greater quantities of wealth than their brothers. At the same time labor was becoming redundant. So while the richer members of the town were looking for larger chances of investment and the poorer artisans were seeking for wider opportunities of employment, there arose internal bickerings which gradually undermined the guild structure from within.

At the same time a strong influence was having a similar effect from without. This was the growing demand for goods. The handicraftsman made his wares according to the tastes and orders of his customers. The customers were men well known and were comparatively few in number. Therefore the work of the handicraftsman was limited in variety and quantity and each factor could be easily and constantly ascertained. The pro-

ducer was relieved of the necessity for keeping large stores of goods on hand, and also of maintaining a big plant. From the point of view of the customer, who really determined the character and size of the business unit, this system of industry is sometimes called "custom production." The change in the character of the customer's demands was the second cause for the gradual displacement of a system whose production was by hand, whose activities were so peculiar to the town, and whose organization from a business point of view was so simple.

Before we begin to trace the changes caused by a further growth of wealth and the extension of the market, it may be well to summarize the principal facts pertaining to the handicraft system.¹ It will serve not only to bring into contrast the conditions under the earlier family system and that period of transition from the family to the handicraft system, but will afford, too, a desirable point from which to trace the later industrial developments. In the handicraft system we have what many are inclined to believe a normal system of business relations. There is a gradual advancement for the laborer, both socially and economically. From the position of apprentice he gradually progresses to the position of the independent master, receiving at all stages an income proportionate to his services. As master he produces with his own hand, directs his own capital and supplies goods for a known group of customers, while in return he gets an exact equivalent for his labor.²

7. *Second transitional period—domestic system.*—So closely allied are the meanings of the words domestic, household and family in the Anglo-Saxon languages that much confusion has arisen in the use of these names for distinguishing different systems of industry. It is

¹ See page 12.

² "Industrial Evolution," by Carl Bücher, page 160.

COMPARISON OF EARLY INDUSTRIAL SYSTEMS.

	FAMILY SYSTEM.	FIRST TRANSITION PERIOD.	HANDICRAFT SYSTEM.
System characterized.	Isolated self-sufficiency.	Beginnings of industrial aid from outside.	Peculiar to the town but still isolated and self-sufficient.
Production.	Agriculture chiefly.	Agriculture chiefly.	Agriculture in the country furnishes raw material. Trading and manufacturing in towns.
Land.	In common, large estates.	Ditto. Small peasantry.	In towns there grew up a system of burgage tenure, near to actual land ownership.
Capital.	A few simple tools owned by the master or lord.	Ditto. Sometimes owned by laborer.	Little fixed capital, increase of movable capital. Owned by artisans and tradesmen.
Labor.	Not free. Little division of employments or processes.	A free laborer appears. Hires out his services to consumer for board and shelter and travels about.	Not only free, but the laborers form a new class independent economically, politically and socially.
Power.	Human energy.	Ditto.	Ditto.
Exchange.	None.	Very limited.	Between town and country and within the town.
Market.	Consumers of the household.	Among different households.	Consumers of the local town supplemented by fairs and markets.
Commerce.	None.	Peddling.	Some distant trade in luxuries.
Place of labor.	Estate of lord.	In house of consumer.	Own home.

natural that the earlier writers should emphasize the differences which were presented from the point of view of labor. Accordingly we find the history of industrial development divided into periods conforming to the relative freedom of the laborer. Did the prevailing system employ slave, serf or free labor? Were the rights of the laborer protected by custom or contract, etc.,? Another way of distinguishing the epochs of economic development was to characterize the periods according to the place where the work was carried on. Therefore we get the familiar division of "family," "domestic," and "factory systems."

From this point of view there is little distinction between the handicraft system and the domestic system, but during the latter period there were other developments affecting the industrial organization which are as necessary to be observed as the status or condition of labor. From the view point of the capitalist and the entrepreneur, this period marks the beginning of a new differentiation in the employment and management of capital. From the view point of labor, the period may be called the domestic system only when contrasted with the period which follows, that is, the factory system. It is noticeable, however, that neither the capitalist nor the laborer have their functions so clearly separated or so closely united as under the factory system or the previous handicraft system; hence the appellation transitional period is more significant and less liable to be confused than the older expression—domestic system.

8. *Extension of national government—appearance of middle men.*—It would be difficult to understand the changes that the economic organization underwent in this period, if reference were not made to the state. Economically, this was manifested in the extension of

the national power over the domain of commerce and industry. The national government had been growing in strength and power. The protection it was able to offer its citizens allowed them more time and energy for the production of wealth. It permitted them to live outside the barricaded towns and also allowed men to spread out over the country in groups—not military assemblages, but industrial clusters—which were the beginnings of a national division of industry. As men or groups of men engaged in different industries became more separated, it was natural that a class of men should arise whose chief function was to supply the various groups with the products which each lacked. The strengthened national governments helped this interchange of products as well as the growth of capital. They offered increased protection to both.

This transitional period comes at different times in different countries but in England it extends from the middle of the Fifteenth Century to the middle of the Eighteenth. Defoe, in his tour through Great Britain (1724–1726), describes the situation thus:

The land was divided into small inclosures from two acres to six or seven each, seldom more; every three or four pieces of land had an house belonging to them, . . . hardly an house standing out of a speaking distance from another. . . . We could see at every house a tenter, and on almost every tenter a piece of cloth or kersie or shalon. . . . At every considerable house was a manufactory. . . . Every clothier keeps one horse, at least, to carry his manufactures to the market, and every one generally keeps a cow or two or more for his family. By this means the small pieces of enclosed land about each house are occupied, for they scarce sow corn enough to feed their poultry. . . . The houses are full of lusty fellows, some at the dye-vat, some at the looms,

others dressing the cloths; the women or children carding or spinning, being all employed, from the youngest to the oldest.

The clothing trade was the most highly developed, and it is here that labor and capital in business began to show their combined force under new relations to each other. Besides the "clothiers" mentioned by Defoe, who seemed to combine the double function of middleman, collectors and distributors, there was a class of "factors" who devoted themselves exclusively to buying wool from the farmers and selling it to the "clothiers." Another class of middlemen forwarded the goods to the retailer after they were finished. This class consisted of three types, each distinguished by the method pursued in reaching the retail trade. First, there was the wholesale dealer who attended the big fairs or markets. He made large purchases and then traveled over the country with his packhorse for the purpose of selling to the retailers. Secondly, there was the merchant who bought the goods and then sent them out of the country. He was the exporter. Third, there was a composite type of distributor, who, on the one hand, was a commission man who bought from the clothiers and delivered to their "factors" in London, and on the other hand, acted as a warehouseman and looked after the disposition of the goods to the home trader and foreign exporter.¹

So we see that although industry was still carried on by hand in a small way, the functions of merchants and workman were separated. Although the merchant was not yet a capitalist nor the workman a manufacturer in the modern acceptance of the terms, still there is a distinct line of cleavage between the men who furnish the

¹ "The Evolution of Modern Capitalism," by John A. Hobson, page 59.

capital and those who give their labor. The merchant class arose during this time and toward the end of the period became the capitalists of their day. At the beginning of this period the workman owned his own tools and conducted his work at his own home, but received the raw materials from one middleman and delivered his goods to another; but he gradually lost control of his other capital possessions—his tools, which were furnished by the merchant also during the latter part of the period. The gradual loss of the economic independence of the laborer is noticeable.

9. *Organization of capital investments by the use of "joint stocks."*—Although we see here the growing importance of capital and its divorcement from the control of the laborer, still the business organization of capital was very defective. Commercial banking and credit systems were unknown. Each merchant furnished his own capital, and outside of the use of the co-partnership principle, there was very little capitalistic coöperation in the field of productive industry. The first appearance of the joint-ownership of large capitals for business purposes came in the field of the merchant's activities. The company form of organization was adopted by the great trading companies of the Sixteenth and Seventeenth Centuries. The East India Company and the Hudson Bay Company are familiar examples of the early application of this joint-stock principle to business enterprise. Men had so little experience, however, with the manipulation of great capitalistic enterprises, that few would venture their wealth unless their company was granted a monopoly by the government. But with the opening up of foreign markets and the demand thus occasioned for manufactured goods, men began to seek new methods by which

these could be supplied. Toward the end of the Eighteenth Century, therefore, we observe a tendency to bring about an extension of the joint-ownership of capital and a more effective combination of labor units in the business of manufacturing.

Mr. Cunningham cites the example of a company which in 1764 was formed with a capital of £100,000 for the manufacture of fine cambrics, but which made little progress on the whole until the next century, when the joint-stock principle was applied to production. The most important changes were brought about in attempting to apply capital more lucratively by inventing labor saving machinery and in bringing the labor units into a more effective combination. The following extract from the report of a parliamentary committee on the woolen manufacture in England in 1806 shows the condition under which the domestic system was breaking up on account of the new influences.

It may be expedient for your committee to state that there are different modes of carrying on the woolen manufacture—that of the master clothier of the west of England, the factory and the domestic system.

In all the western countries as well as in the north there are factories, but the master clothier of the west of England buys his wool from the importer, if it be foreign, or in the fleece, or of the wool stapler, if it be of domestic growth; after which, in all the different processes through which it passes he is under the necessity of employing as many distinct classes of persons; sometimes working in their own houses, sometimes in those of the master clothier, but none of them going out of their proper line. Each class of workmen, however, acquires great skill in performing its particular operation. . . .

In the factory system the master manufacturers, who sometimes possess very great capital, employ in one or more build-

ings or factories, under their own or their superintendent's inspection, a number of workmen, more or fewer according to the extent of their trade. This system, it is obvious, admits in practice of local variations. But both in the system of the west of England clothier and in the factory system the work, generally speaking, is done by persons who have no property in the goods they manufacture, for in this consists the essential distinction between the two former systems and the domestic.

In the last-mentioned or domestic system, which is that of Yorkshire, the manufacture is conducted by a multitude of master manufacturers generally possessing a very small and scarcely ever any great extent of capital. They buy the wool of the dealer; and in their own houses, assisted by their wives and children, and from two or three to six or seven journeymen, then dye it (when dyeing is necessary) and through all the different stages work it up into undressed cloth.

Various processes, however, the chief of which were formerly done by hand under the manufacturer's own roof, are now performed by machinery in public mills, as they are called, which work for hire. There are several mills near every manufacturing village, so that the manufacturer, with little inconvenience or loss of time, carries thither his goods and fetches them back again when the process is completed. When it has attained to the state of undressed cloth he carries it on the market day to a public hall or market where the merchants repair to purchase. Several thousands of these small master manufacturers attend the market at Leeds, where there are three halls for the exposure and sale of their cloths. . . .

Though the system which has been just described be that which has been generally established in the West Riding of Yorkshire, yet there have long been a few factories in the neighborhood of Halifax and Huddersfield; and four or five more. . . . These have for some time been objects of great jealousy to the domestic clothiers. . . .

Your committee cannot wonder that the domestic clothiers of Yorkshire are warmly attached to their accustomed mode of car-

rying on the manufacture. It is not merely that they are accustomed to it—it obviously possesses many eminent advantages seldom found in a great manufacture.

It is one peculiar recommendation of the domestic system of manufacture that, as it has been expressly stated to your committee, a young man of good character can always obtain credit for as much wool as will enable him to set up as a little master manufacturer, and the public mills, which are now established in all parts of the clothing district, and which work for hire at an easy rate, enable him to command the use of very expensive and complicated machines, the construction and necessary repairs of which would require a considerable capital. Thus instances not unfrequently occur wherein men rise from low beginnings, if not to excessive wealth, yet to a situation of comfort and independence.

It is another advantage of the domestic system of manufacture, and an advantage which is obviously not confined to the individuals who are engaged in it, but which, as well as other parts of this system, extends its benefits to the landholder, that any sudden stoppage of a foreign market, any failure of a great house, or any other of those adverse shocks to which our foreign trade especially is liable, in its present extended state, has not the effect of throwing a great number of workmen out of employ as it often does, when the stroke falls on the capital of a single individual. In the domestic system the loss is spread over large superficies; it affects the whole body of the manufacturers; and though each little master be a sufferer, yet few, if any, feel the blow so severely as to be altogether ruined. Moreover, it appears in evidence that, in such cases as these, they seldom turn off any of their standing set of journeymen, but keep them at work in hopes of better times.

Happily, the merchant no less than the domestic manufacturer finds his interest and convenience promoted by the domestic system. While it continues he is able to carry on his trade with far less capital than if he were to be the manufacturer of his own cloth. Large sums must be irrevocably invested in

extensive buildings and costly machinery; and, which is perhaps a consideration of still more force, he must submit to the constant trouble and solicitude of watching over a numerous body of workmen. He might then often incur the expense of manufacturing articles which, from some disappointment in the market, must either be kept on hand or be sold at a loss. As it is he can agree with his customer, at home or abroad, for any quantity of goods; and, whether on a long-expected or a sudden demand, he can repair at once to the market, and most probably purchase to the precise extent of his known wants; or, if the market happens not to furnish what he wishes to purchase, he can give out his sample and have his order executed immediately. . . .

It would not be difficult to prove that the factories, to a certain extent at least, and in the present day, seem absolutely necessary to the well-being of the domestic system, supplying those very particulars wherein the domestic system must be acknowledged to be inherently defective; for it is obvious that the little master manufacturers cannot afford, like the man who possesses considerable capital, to try the experiments which are requisite, and incur the risks, and even losses, which almost always occur in inventing and perfecting new articles of manufacture, or in carrying to a state of greater perfection articles already established. He cannot learn by personal inspection the wants and habits, the arts, manufactures, and improvements of foreign countries; diligence, economy, and prudence are the requisites of his character, not invention, taste, and enterprise; nor would he be warranted in hazarding the loss of any part of his small capital: he walks in a sure road as long as he treads in the beaten track; but he must not deviate into the paths of speculation. The owner of a factory, on the contrary, being commonly possessed of a large capital, and having all his workmen employed under his own immediate superintendence, may make experiments, hazard speculation, invent shorter or better modes of performing old processes, may introduce new articles, and improve and perfect old ones, thus giving the

range to his taste and fancy, and thereby alone, enabling our manufacturers to stand the competition with their commercial rivals in other countries. Meanwhile, as is well worthy of remark, many of these new fabrics and inventions, when their success is once established, become general among the whole body of manufacturers; the domestic manufacturers themselves thus benefiting in the end from those very factories which had at first been the objects of their jealousy. The history of almost all our other manufactures in which great improvements have been made of late years, in some cases at an immense expense, and after numbers of unsuccessful experiments, strikingly illustrate and enforce the above remarks. It is besides an acknowledged fact that the owners of factories are often among the most extensive purchasers at the halls, where they buy from the domestic clothier the established articles of manufacture, or are able at once to answer a great and sudden order; while at home, and under their own superintendence, they make their fancy goods, and any articles of a newer, or more costly, or more delicate quality, to which they are enabled by the domestic system to apply a much larger proportion of their capital. Thus the two systems, instead of rivaling, are mutual aids to each other, each supplying the other's defects and promoting the other's prosperity.

This extract is interesting in showing how clearly the committee saw the general principles of business in their application to commerce and trade; but how little were they able to foresee the effects that were about to be produced in the field of industry by the adoption of the joint-stock method of financing enterprises, and the application of steam power, and the factory method of handling labor in manufacturing processes.

The dates marking the changes during the last part of the second transitional period and the important influences which brought about the disintegration of the

domestic system may be summed up as follows for the textile industries. Other industries soon followed.

- (1) Before 1770, early experiments with inventions.
- (2) 1770–1790, development of great mechanical inventions.
- (3) 1790–1830, application of steam power.
- (4) After 1830, development of transport facilities and growth of the market.

CHAPTER II

DEVELOPMENT OF ORGANIZATION (*Continued*)

10. *Factory system*.—This is the system under which the modern industrial world moves. It is hardly saying too much to credit it with giving color to modern civilization. When we speak of our times as being the industrial age, or say that our religious, political and social institutions are dominated by the commercial spirit, we have reference to the conditions and influences that have been brought about under the “factory system.”

The changes that began to take place under the domestic system during the latter part of the Eighteenth Century were carried on during the Nineteenth Century. The substitution of steam power for man power in the production of goods was equivalent to an increase of productive efficiency that would have been brought about by increasing the population several thousand times. So great was the output that the consuming capacity of the population has not yet been able to overtake the productive capacity of the people. For this reason, each of the great manufacturing nations is striving to protect its home market and to push its surplus into those countries where modern industrial organization has not yet penetrated. That is, the problem of modern business organization is to maintain and win new markets for its product. Nations were able during the period of the domestic system to win new markets by conquest and colonization. They held these markets

by a policy of colonial administration which compelled the colonies to consume and to export only those goods that permitted the "home country" to dispose of its surplus stock most advantageously. England's attempt to enforce this policy in America brought about the War of Independence, and the influence of its outcome brought a change in colonial administration throughout the world. Although much can still be done by a nation in advancing its foreign trade, yet in its last analysis the success of the business man must depend upon his resourcefulness in producing a cheaper and a better article than his competitor.

11. *Coöperation and centralization.*—The first great advance in the direction of cheapening production was the invention of a machine that would do the work of several men. The next step was the improvement of these machines, and much is still being done in this line, but the technical efficiency of a machine may be counter-balanced by many other considerations. The machine may be situated at so great a distance from the source of power that the cost of conveying the fuel or other medium may be greater than the sum saved by using mechanical contrivances. So business men saw the advantage of moving the machine near to the coal fields and water falls. And then too, they put the machines under one roof instead of having them scattered about in the homes of the working men. This brought the laborers under one roof. The accumulation of a large amount of capital and the assembling of a numerous body of workers under the direction of a central management constitutes the essential part of the reorganization which business underwent in shifting from one system to another. These form the foundation upon which the modern industrial organization was to rear itself.

The use of machinery was accompanied by a greater division of labor and hence, greater coöperation. The business unit considered as a combination of capital and labor has increased in size, and the two components have assumed such entirely new relations to each other that many of the most pressing problems of to-day depend for their solution upon a method which will make them coöperate more effectively and harmoniously.

12. *Effect upon the laborer's status.*—In order that this relation may be seen clearly by the modern employer of labor, the present laborer's position may be compared with the earlier handicrafts-man. Before the introduction of steam power, the workman owned his own lathe, or hand loom and so on, he applied his own muscular force, and he guided and directed the implements or tools according to his skill and sentiments. By a series of economic changes he lost possession of the tools but still furnished the skill and muscle necessary in the production of goods. The next step in the divorcement of the laborer from his work was to supply an independent source of motive power which removed the tool from the direct guidance of the individual and made him a "machine tender" rather than a craftsman. This is an important step, for the relation of the laborer to the work is changed from a direct to an indirect relation. He still coöperates but neither the skill of his hands nor a feeling of proprietorship in the machine or the product is left to give him a personal interest in the outcome.

With the shifting of the machine from the home to the factory there was a still further break in the interest of the laborer in his work. As the business unit grew in size, the laborer felt his growing insignificance. Not only was he separated from any direct interest in the machine, but the increasing of the productive process

was putting him farther and farther away from any contact with the men who were directing the business policy of the concern.

As the early handicraftsman was forced from the market by the increase and growing complexity of the demand for goods and grew suspicious and rebelled against the middleman who furnished the capital and assumed the risks of marketing the products of his labor, so the artisan to-day is forced from a direct connection in production. Other men furnish the capital, direct the business policy and manage the processes of production. The laborer feels his dependence and looks upon his coöperator capitalist with suspicion and distrust. To meet the power which capital exerts in the business, the laborers have combined into "trade unions," and after a long struggle they have established their right to speak as a body in the interests of the individual members. They have made great progress along this line by substituting the method of "collective bargaining" for the old method in which the individual laborer stood alone in bargaining for his wage with the employer. At present the unions support the claims and demands of their members.

To restore some of the advantages which existed under the simpler forms of industrial organization, many of the large establishments of to-day are adopting methods of payment such as profit sharing, as well as plans for the better housing of their employés, and various devices for improving their condition while at work which is termed "welfare work." The object is mainly to regain that personal touch between employer and employé which was lost in the complex business organization of to-day. These will be treated of later as a part of the business policy of an enterprise. It is mentioned

here simply to show how these modern problems of business are connected with the larger industrial development.

The increase of production due to a better organization of the essentials contributed by labor was accompanied by a continual improvement in the character of the machine.

The economic advantage of the early machines consisted chiefly in the economy of working in combined action a number of similar tools by the agency of a single motor.

The more highly evolved modern machinery generally represents an orderly sequence of processes by which mechanical unity is given to labor once performed by a number of separate individuals or groups of individuals with different sorts of tools. But the economy of the earlier machines was generally of a different character. It consisted, for the most part, not in the harmonious relation of a number of different processes, but rather in a multiplication of the same process raised sometimes to a greater size and more speed by mechanical contrivances. So the chief economic value of the earlier machinery applied to spinning consisted in the fact that it enabled each spinner to work an increased number of spindles and performing with each the same simple process that he formerly performed with one. In other cases, however, the element of multiplication was not present, and the prime economy of the machine consisted in superior skill, regularity, pace or economy of power obtained by substituting mechanical direction of the tool for close and constant human direction. In modern machinery the sewing machine illustrates the latter, as the knife-cleaning machine illustrates the former.¹

13. *Producer as a business man.*—The chief directions in which the business manager applied his energies in order to reduce the costs of production and to increase

¹ Hobson, "The Evolution of Modern Capitalism," page 46.

his output was as mentioned above. But non-human power and the machine called for large outlays of capital. This was supplied by the constantly increasing surplus due to more efficient production under the factory system. The capital, however, was scattered and men were not as yet experienced in the ways whereby these capitals in various forms and in sundry places might be brought together, thus affording a large accumulation under a single management to be used in some one industry. This was the problem set for the business men of the last century. In 1800 the principal form of a business enterprise whereby the capital of more than one man might be used in the promotion of industry was the partnership. This form was fitted to the conditions of earlier systems although its limitations were manifest when the great commercial and trading companies were organized in the seventeenth and eighteenth centuries. Many men were willing to invest a part of their capital, provided by so doing they did not endanger the remainder of their possessions through the risks of the venture or the speculations of the partners. The partnership form of organization did not permit such men to dispose of their capital, since the essential principle of the partnership is that each member is liable to the extent of his whole possessions, and is bound by the actions of his partners.

The increasing wealth of both nations and individuals forced the business man into a consideration of means whereby it might be used as capital in further production. He saw that increased production and cheapened costs which depended simply upon new inventions and the application of a non-human power would soon reach their limits if there were not combined with these the advantage of "large scale production." Under this

method the business man utilizes his space and time to the fullest advantage. The more goods he can turn out upon a given space and in a given time, the less heavily do the ground rent, the interest charges, and so on, fall upon each unit of goods. He saw also that the same policy applied to his wage costs. If a laborer could attend four machines with the same effort that he could watch two machines, then the costs per unit of output would be lessened very materially by providing more machines and increasing the output. But a business policy of this kind called for the accumulation of larger capitals. It could not be supplied by one individual nor by the joint-stock of a few individuals which the partnership form of organization permitted.

It was evidently time to extend the operation of the joint-stock principle as found under the partnership by removing the restrictions of unlimited liability imposed upon business associations of this kind. Accordingly joint-stock companies were permitted to organize under the law. Each member was limited in his liabilities to the amount of his capital investment. In England, these companies were known as "limited companies," while in the United States they are spoken of as corporations.

Although according to the recent researches of Deloune and Weber the commercial corporation probably existed in the later centuries of the Roman Republic, in its modern shape it dates from the early medieval Italian cities. The earliest form was that of a so-called "bank," individuals associating their capital to form a joint-stock, loaning it to the government on a pledge of certain revenues, and participating in the profits according to their holdings. Thus the beginnings of public credit and of corporate enterprise are found intimately associated. The next important development of the joint-stock principle was in the

trading companies of the sixteenth century, which were at first mere temporary associations for the purpose of a single voyage, but which gradually assumed a more permanent form. It was not, however, until the predominance of industrial over commercial capital in the nineteenth century that we find the immense expansion of corporate enterprise which marks modern life.¹

To the above economic advantages may be added that of perpetual life. Unlike the individual firm or the partnership which must be changed with the death of a member, the corporation never dies until the business is liquidated. "The shareholder may disappear but not the shares." This permanency of life enables it to plan for the future. The "to-morrow departments" of large industries of the present can plan with the assurance that there will be a business successor or inheritor who will carry out its plans with ability, or if needs be, who can wisely adjust the policy to altered conditions.

14. *Trusts, or unions of corporations.*—During the last half of the Nineteenth Century the advantages of united capital became so apparent that large scale production developed into gigantic scale production. In order to meet the demands for immense accumulations of capital, it became expedient to form corporations whose membership was made up of smaller corporations. Although there were other motives than those of economizing production through increasing the size of the business unit, yet this is still a strong argument in favor of the modern form of organization known as the trust. So important has the financiering of modern corporations become that it is separated from the productive end of the business and given a distinctive department.

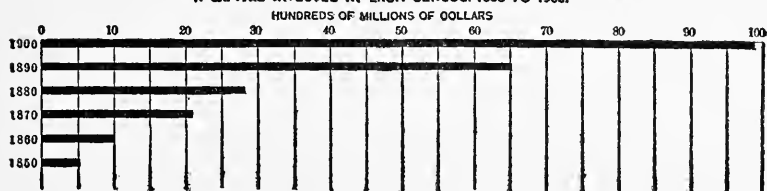
¹ Seligman, "Principles of Economics," page 96.

The raising of capital by the marketing of securities is treated in the volumes of this series entitled **CORPORATION FINANCE** and **INVESTMENT AND SPECULATION**.

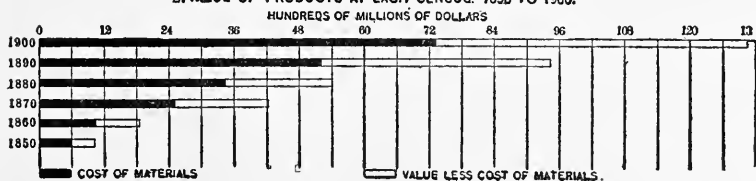
In no country has the increase in capital been so rapid and vast as in the United States. Hence it is here that we should expect to find the greatest tendency toward the organization of industry in large establishments. Beginning in 1812, we find some concentration on a large scale, but it was not until 1850 that the machine supplanted hand work, and not until 1865 that large scale production became the prevailing type of industry.

The following diagrams from the Reports of the Twelfth United States Census Statistical Atlas will give some idea of this vast capital increase and likewise a comparison of the cost and value of products produced. The next table of industries shows the growth of combination.

1. CAPITAL INVESTED AT EACH CENSUS: 1850 TO 1900.



2. VALUE OF PRODUCTS AT EACH CENSUS: 1850 TO 1900.



<i>Name,</i>	<i>When founded or reorganized.</i>	<i>Capitalization, Outstanding Stock and Bonds, 1907.</i>
1. United States Steel Corporation.....	1901	\$1,371,249,600
2. American Tobacco Company.....	1904	230,569,500
3. American Smelting & Refining Co.....	1905	177,000,000
4. International Mercantile Marine Co.....	1902	175,961,200
5. Amalgamated Copper Co.....	1899	153,880,000
6. International Harvester Co.....	1902	120,000,000
7. Central Leather Co.....	1905	108,719,800
8. Lackawanna Steel Co.....	1892	103,901,400
9. Pullman Co.....	1867	100,000,000
10. Standard Oil Company.....	1899	98,338,300
11. Mackay Companies.....	1903	91,380,400
12. American Sugar Refining Co.....	1891	90,000,000
13. United States Rubber Co.....	1892	89,911,600
14. Corn Products Refining Co.....	1906	87,118,100
15. American Can Co.....	1901	82,466,000
16. Colorado Fuel & Iron Co.....	1903	79,325,500
17. Pittsburg Coal Co.....	1899	78,880,400
18. American Woolen Co.....	1899	68,000,000
19. American Car & Foundry Co.....	1899	60,000,000
20. Republic Iron & Steel Co.....	1899	57,876,900
21. Distillers Securities Corporation.....	1906	57,709,941
22. International Paper Co.....	1898	55,620,500
23. Swift & Company.....	1885	55,000,000
24. National Biscuit Co.....	1898	54,040,500
25. Dupont De Nemours Powder Co.....	1903	50,022,689
26. United Copper Co.....	1902	50,000,000
27. American Locomotive Co.....	1901	50,000,000

15. *Division of labor.*—The mass production which was possible only with the advent of the machine has been furthered by the specialization of labor. Mass production is thus correlated to labor as closely as it is to capital. From the point of view of industry this division of labor has manifested itself in four directions.

First, there was the differentiation of the process of making a living between man and woman. The division of society into social classes is a result of the

working of this principle. The military class, the priesthood, and the industrial classes are examples of these social groups.

Second, it took ages for this elementary division of labor to take place, but the efficiency gained by society was so great that the same force has been operative within the various classes themselves. The great industrial class is the only one in which we are at present interested, and it is here that we find the best examples of the division of labor, especially among the textile industries. It was in this field that the earliest of the inventions was applied. This start in industrial development has been maintained and the operation of the great industrial force can be clearly discerned. For instance, certain mills manufacture yarns; others do only the weaving; and still others dye and prepare the cloth for the trade.

Third, we find within each of these branch industries a still further refinement of this specialization. Each business has its technical processes divided into separate classes. This means that certain groups of workmen apply themselves to one machine process while other groups are likewise limited, each to some one kind of labor. Thus the modern factory discloses perhaps hundreds of separate processes all working to turn out a completed article which in former times was made entirely by one man. To make a shoe in some factories requires nearly two hundred operations each conducted by a separate class of operators. In the manufacture of a high grade watch there are more than one thousand kinds of machines each with its different set of laborers. The advantage of this kind of specialization is obvious but the extent to which it is carried in the manufacture of the commonest articles is often overlooked. For ex-

ample, the horse-rake has three hundred parts, the mower is made up of six hundred, and the binder contains 3,800 parts. If we compare this with the old reaping tool of two pieces—the handle and the blade—the development of the machine and the consequent division of labor are very evident. The close connection between specialized labor and increased output is also illustrated by the manufacture of reapers. In one year the McCormick Company turned out 56,000,000 castings. This company devotes one department solely to the making of chain-links, and the output runs to nearly sixty million a year. Another department makes more than 400,000 linch pins per day.

This great output can only be accomplished because of the specialization of labor and the use of special machinery. The laborer, through greater familiarity with one process, increases his dexterity while the machine supplies a tireless energy and precision which man alone cannot give to it. A boring instrument in this same factory can make five holes in a casting in six minutes. It took four hours to do the same work by hand. In the paint shop one unskilled workman can paint four hundred reaper frames a day by dipping them into a great tank of paint.

The saving in the cost of production is well illustrated in the same connection. In 1845 the inventor of the reaper paid four and a half cents for one bolt. These were made by hand. To-day the company makes bolts at the rate of fifty for one cent. It was the same with "guard-fingers." Only fifty years ago these cost 24 cents each. At present, by machine and the assistance of one man, 1,300 guard-fingers can be turned out in one working day at a labor cost of six for 1 cent. Perhaps the carpenter shop offers the best illustration

of the saving which mass production is capable of giving as a result of the substitution of hand methods by machinery, and the improvement of technique through division of labor. Here, a machine that cost \$2,500 performs the single function of shaping poles. It saves only one penny a pole but this means \$3,000 a year on the 300,000 poles which it turns out.

16. *Territorial division of labor.*—There is also a fourth division of labor which is characterized by the location of the industry. Labor is applied to industry to greater advantage in some localities than in others. In large cities like New York and Chicago, the various lines of wholesale business gather in districts by themselves. This fact is so well known by New York workmen that they can tell with a fair degree of accuracy the prevailing wages, the number of hours of labor per day, the business habits of opening early in the morning or of giving a half holiday on Saturday if they know within what section the business is located. For instance, a book-keeper who wished to stop work early in the afternoon would feel that his chance for getting such a position would be very poor if he applied in the district bounded by Fourth Street on the south and Twenty-third Street on the north; Fifth Avenue on the west and Second Avenue on the east.

The reason why industries are gathered in certain localities in cities, or on a wider scale of the nation is because some places or territories are better fitted to some industries than others. Some of the peculiar characteristics pertaining to the territorial division of labor are as follows:

1. Natural characteristics:

- (a) Proximity to coal, water power, or raw material.

- (b) Favorable climate.
- 2. Business characteristics:
 - (a) Nearness to markets.
 - (b) Cheap labor supply.
 - (c) Abundant capital supply.
 - (d) Good credit facilities.

17. *Advantages and limitations.*—That there have been many advantages which the business world has gained through its increased wealth due to the division of labor cannot be gainsaid, but the business man would go far astray in many respects if he did not recognize the limitation of the application of this principle. Many of the remedies which advanced thinkers are trying to apply to the industrial organization of to-day have to do with the evils caused by too great specialization and production on a large scale. Diversification must be supplemented by coöperation. It is in the third division of the mechanical division of labor that the business man is treated from the point of view of the business enterprise. If machine work and labor specialization simply bring to the laborer greater intensity of work, then the basis for the prosperity of the employer is unsound. The laborers of a country are also the greatest consumers. Increased output by the industries of a nation without a corresponding growth in the capacity to enjoy, and an increase in the purchasing power so that these goods may be procured on the part of the labor force, will avail the individual producer little in the face of restricted or stunted markets even with cheapened costs of production. Therefore the principle of coöperation must be adopted as a complement to the division of labor. Herein lies the great rôle of the employer of labor. He must see not only the small technical advantages, but also the advantages

which come from a wider view of the results when the whole process is considered. Organization in its broader meaning is attention to coöperative as well as to technical efficiency. First there must be coöperation between labor and capital. Then there must also be that technical combination of laborer with laborer. "Team work" tells as effectively in the factory as on the football field. Each man plays his individual part, but at the critical moment the combined effort is necessary if the result is to be of value. The great steel foundry divides its work into many sections but all parts must coöperate simultaneously or the product is spoiled.¹

Thus we see that the simple business of early times has evolved into the complex form of to-day in accordance with the same laws which rule plants, planets and political institutions. The prevailing form of organization of the present is still undergoing changes and will no doubt manifest many new features as the years pass by. It seems that the big business in the form of the corporation will be of the type to give its name to the twentieth century industrial organization.

¹ Principles of Economics," by E. R. A. Seligman, page 183.

CHAPTER III

ORGANIZATION OF THE MARKET

18. *Extension of the market.*—Not only has the growth of capital forced changes in the forms of the productive system and in the forms of legal organization, but it has also emphasized the importance of the nation as an economic unit. Commercial interests cannot follow state lines; and as the national surplus increases, trade cannot be bound by national boundaries. The foreign market is a necessary supplement to our increased productive capacity. At first it was necessary to dispose only of our surplus agricultural products abroad, but now that the country is producing such enormous quantities of manufactured goods over and above our home needs, they too must be sold to foreign consumers.

Speaking roughly we can say that business may be divided into two phases. One phase consists of maintaining a continuous flow of goods through the various processes until completed. The raw cotton finds its way to the spinners; and the cloth, after leaving the manufacturer's hands, is conveyed to the warehouse, from whence it passes to the shops to replace the ever dwindling stocks. The other phase is the distribution of completed goods ready for consumption. The first phase is dependent upon the second and the latter is dependent upon the consumer. It is the strength of the consumer's demand that draws on the raw material through the various processes until it reaches the correct

form and the right place at the most appropriate time. It is very necessary, therefore, that the wishes or desires of the consumer become known to the producer with as little delay and confusion of information as possible. On the other hand, it is quite as imperative that the producer be able to deliver his goods to the consumer with each of the above attributes of form, time and place in their highest degree of perfection.

The means by which the consumer expresses his desires and makes his purchases and by which the producer gathers the information and delivers the commodities, is the market. The simplest form of the market is one where the consumer meets face to face with the producer. In this case there can be no deterioration in the character of the goods while passing from one owner to the other. Each one is able to form his judgment in conformity with his own observations, and insofar as this one transaction is concerned, the producer has placed his goods at the most economical point in space and time. Presumably, if this were not so, the place and time would be changed.

19. *Primary function of a market.*—Under the early systems of industrial organization this primary method of purchase and sale predominated. In Genoa several hundred years ago, the buyers and sellers of grain congregated around a certain stone near the docks. For many generations this served as the only market, but later something more systematic—that is, a better market organization—seemed desirable. Accordingly an association was formed, rules were adopted, and a building was erected. This was the beginning of the Genoa Grain Exchange of to-day.

With all the changes that it has been necessary to make in the organization of the market, this primary

function is still the distinguishing characteristic of every market. The strong tendency to keep this simple organization where it is possible to stem modern influence is seen in the Antwerp grain market. Here there is no trade organization other than an Arbitration Committee. It is an open and free market and all the transactions are for cash with the delivery of the actual grain. The grain trade is carried on by local interests, who meet at the Bourse every week day from two o'clock until three. At this time the buyers and sellers close the deals which they have been negotiating during the forenoon. Wednesdays and Thursdays are particularly busy days, and during this time the exchange room is crowded. All business transacted here is of a private nature. No official record of the prices is kept, as there is no organization. A merchant of Antwerp who buys a cargo of wheat in Argentina does not know when he will sell it, nor to whom, nor at what price. Any merchant who buys a bill of goods takes like chances. But it is just this element of uncertainty which has modified the organization of modern markets. That Antwerp stands unique among the great grain markets is largely due, no doubt, to her proximity to other larger markets which have been changed to meet modern conditions, and so in a measure Antwerp is enabled to use the prices of other markets as a basis for her own operations. If this were not true it would be impossible for each merchant in Antwerp to maintain connections with all parts of the world, in order to determine the chief price-making factors.¹

¹ In Antwerp the following are of particular importance: Offers of wheat from the Danubian country and from Argentina, the stocks held by the millers, and the amount of wheat afloat, the movement of the grain crops in the United States and in Canada, and the amount received by such large wheat consuming centers as London, Liverpool and so on.

20. *Market prices a resultant of world-wide influences.*—The situation as it exists in the wheat trade is typical of all forms of commercial and industrial activity. Each individual enterprise connected with the wheat and flour industry has been affected by the greatly extended areas over which wheat is grown, by the improved mechanical processes, and by the organization of labor and capital which have reduced the cost of production. Men of the grain trade must watch the world conditions in order to determine the supply. On the other side, the consumer of wheat must keep informed as to the demands of other countries. In other words, the price of wheat is influenced directly and continually by world-wide influences on both the supply and demand side of the market. No longer can any local market be made up of buyers and sellers who can directly investigate the conditions controlling the price of wheat. The situation has become too complex, and with complexity and extension have come uncertainty. If producers and consumers were to give up their time to solve all the commercial riddles which modern organization presents, they would have little time left for any other business.

21. *Function of the middleman.*—Accordingly there has risen within the industrial system a class of men who are willing to devote their whole time to the gathering of information and to analysis of the conditions which it reflects. These men are willing to support their judgments of the outcome with their money. They say to the producer, "We are willing to buy your goods to-day at the prevailing price for the privilege of selling it in the future at the price which we believe will then exist." In other words they assume the commercial risk for the privilege of making any profit that may arise

from a change of price in harmony with their predictions. The amount of these risks varies with the trade. Some trades support a separate class of risk-takers called speculators, others have a class of middlemen who do not assume the entire risk, but owing to their training and experience are in a position to aid both producer and consumer in effecting exchanges of commodities. These men are variously spoken of as commission men, factors, jobbers, brokers and so on.

22. *Market for raw materials.*—The specialization that has followed the development of industry has made its appearance in the market also. Cotton, grain, clothing, machinery and many lines of business have each a special market. The organizations of such markets vary in accordance with the means by which the function of buying and selling can be carried on most economically. The handling of the raw materials differs from the distribution of the manufactured product. This distribution is based largely on the relation of the two classes of commodities to the consumer. The great bulk of the agricultural products is not wanted directly by the final user of these commodities. The smoker of a cigar seldom thinks of the tobacco plant or the dry leaf. The wearer of a calico dress gives no attention to the cotton field or the cotton bale. Neither of these consumers wants more than a comparatively small amount of cigars or calico at one time. Furthermore, the qualities which the buyer demands in these goods are produced by the manufacturer and these demands are subject to sudden changes. The buyers of manufactured articles seek to produce their goods after a personal inspection and a series of bargainings. They do not meet in competition at a given time and place.

Therefore, the organization of a market that is to

meet the conditions here presented must be very different from that in the field of agricultural products. The latter are distributed to the manufacturer in great quantities. It would be a great economic loss if he were compelled to travel over a territory large enough to supply himself with the required amount and quality of raw cotton, wheat or tobacco. The miller would lose time and money if he were compelled to bargain with the farmer for enough grain to keep a modern mill running. For example, the Pillsbury A Mill in Minneapolis grinds into flour the output of more than thirty wheat farms of two-hundred acres each in one day. Such a business would naturally find great advantages in drawing the grain from the country into a central market. Another source of demand for wheat comes from those foreign nations who wish to import grain. If it were necessary for each importer to look to the farmer directly for grain, there would be a greater economic loss than in the case of the millers. Consequently, we find the grain drawn from all quarters of the grain belt to central points convenient for shipping. In the case of the great primary grain market at Minneapolis, the demand of the local mills forms the basis for that market, while the New York market depends upon the export demand for its support. The nature of the commodity, too, aids in this method of marketing. It can be handled in bulk without injury under ordinary precautions. It can be stored away for long periods without deterioration. It lends itself readily to the business policy of buying and selling in large bulk because it is easily graded into different classes in accordance with the demand for certain standard qualities. Furthermore, where the demand is extensive enough it becomes subject to the tendency of the business men to buy and

sell for future delivery. Hence the dominant feature of all markets for the distribution of agricultural products like grain, cotton, tobacco and produce is the strong tendency toward speculation. But in each of these special markets the business man has turned over the speculation business with its profits and losses to the speculator, and he has received in return the opportunity to insure himself against unforeseen losses which arise in this direction. The result of these many factors has been to create a number of exclusive competitive markets provided with rules and regulations and controlled by a special class of traders.

23. *Market for manufactures.*—The organization of the market for the distribution of manufactured wares is the outcome of a different set of influences. It lacks the centralization of wares into a few great competitive markets, although there are well-known centers where special lines of goods are sold. There are no general rules by which the traders are governed, for they do not meet in an “exchange” to compete with each other in the buying of their goods. Articles like machinery, clothes, boots, automobiles, typewriters and so on are sent to various points at which they meet the consumer. At these places will be found the offices of the manufacturers, the jobbers and the commission men.

The organization of the first kind of market may be briefly stated to conform to the necessities of gathering the raw materials from many scattered sources for the purposes of mass production. This gives us central markets where the dealers can congregate and compete for the raw materials. The second class of markets must meet the conditions of a reverse nature. The problem of the manufacturers is to distribute their wares from large centers of production among numberless

purchasers. It is more economical to break up the market into small distributing points, and as a consequence, the manufacturer is confronted with the complex problem of devising means for reaching the purchasers. The various steps taken in this process give us two distinct methods, the wholesale and retail.

24. *A grain market.*—The annual receipts of grain at Chicago amount to a total of 240,000,000 to 300,000,000 bushels. Wheat constitutes from 25,000,000 to 50,000,000 bushels of the total grain receipts. This makes Chicago the greatest grain center in the world. If, however, we measure a market by the number of transactions which take place, the above figures do not represent the market. The total transactions in wheat alone far exceed the crop for the whole country, and to this is added several hundred million bushels for corn and oats. Such activity as these figures represent assures to dealers the world over an opportunity at all times to buy or dispose of any quantity of grain, wheat especially.

A peculiar characteristic of the market is that it is not necessary to ship wheat here for delivery on every sale, nor to take wheat on every purchase. It is not even necessary to take or deliver a warehouse receipt on every transaction. Contracts may "set off" other contracts and hence this peculiarity. The method has its counterpart in the banking system, where checks and drafts "set off" ¹ other checks and drafts.

¹ The Supreme Court of the United States holds that "set-off has all the effects of delivery." In the decision of May 8, 1905 the following decision was rendered:

"When the Chicago Board of Trade was incorporated we cannot doubt that it was expected to afford a market for future as well as present sales, with the necessary incidents of such a market, and while the State of Illinois allows that charter to stand, we cannot believe that the pits, merely as places where future sales are made, are forbidden by the law.

25. *Receiving and storing the supply.*—Although it is not necessary to make or to take a delivery of actual wheat in every transaction, nevertheless there must always be present within easy reach a large supply of wheat. It is necessary, therefore, to divide the market into two parts, (1) the place where the transactions of buying and selling take place, and (2) the departments and facilities for receiving and trans-shipping, or the storing, inspecting and grading of the grain. We will treat of them in inverse order. Chicago receives the larger part of her grain from the states to the south-west and west as far as Kansas and Nebraska, and north as far as southern South Dakota and southern Minnesota. Although the greater part of this grain comes by the railroad, yet there is a considerable volume of grain brought in by way of the lakes. Immense quantities leave Chicago for the eastern markets of the United States for Europe either by way of the railroads or in boats down the lakes.

Much grain is stored in this market by means of im-

But again, the contracts made in the pits are contracts between the members. We must suppose that from the beginning as now, if a member had a contract with another member to buy a certain amount of wheat at a certain time and another to sell the same amount at the same time, it would be deemed necessary to exchange warehouse receipts. We must suppose that then, as now, a settlement would be made by the payment of differences, after the analogy of a clearing house. This naturally would take place no less that contracts were made in good faith for actual delivery, since the result of actual delivery would be to leave the parties just where they were before. Set-off has all the effects of delivery. The ring settlement is simply a more complex case of the same kind. These settlements would be frequent, as the number of persons buying and selling was comparatively small.

"The fact that contracts are satisfied in this way by set-off and the payment of differences detracts in no degree from the good faith of the parties, and if the parties know when they make such contracts that they are very likely to have a chance to satisfy them in that way and intend to make use of it, that fact is perfectly consistent with a serious business purpose and an intent that the contract shall mean what it says."

mense elevators. The combined capacity of all the storage facilities is estimated at from 60,000,000 to 70,000,000 bushels but from this total must be subtracted all those storage facilities that are not used for receiving and shipping and are consequently not a factor in the grain-handling business. Not including such elevators in the list, there are still about twenty-four private elevators with a capacity approximately of 21,000,000 bushels. These are really factors of the receiving and shipping business. Besides there are fourteen public elevators with a capacity of 23,000,000 bushels, making a total storage capacity of 44,000,000 bushels. These are the "terminal" elevators and their function is to receive grain for storage. They are spoken of as "public" or "regular" if they serve the public generally; and as "private" if they are devoted to the interests of their owners solely.

Chicago is also headquarters for many line elevator companies, some of which have lines of houses extending throughout the Central States, and west through Illinois, Iowa and Nebraska and southwest through Kansas and Oklahoma. The grain houses consist of the terminal elevator companies, the line elevator companies and the commission companies. The last may be divided into four classes: (1) those that transact a cash grain business only, (2) those that do both a cash grain and a "future" business, (3) those whose dealings are confined to the future markets, (4) the buyers for such interests as the big mills and for export.

The interests of the mills and exporters in the market are quite different from those of the elevator companies. The former are always buying in the open market. They never buy in the country. The line elevators buy in the country and sell in the market. The terminal

elevator companies buy in the market and sell again in the market to the mills, to the exporter or to the grain men of other cities. The commission men merely sell the grain that is shipped to them to the best customer they can secure.

26. *Inspection and grading.*—The efficiency of the systems of inspection and grading of commodities in a market largely determines the size and prosperity of that market. The inspection must be carried on by reliable and competent men and the grading must be honestly done. Unless a commodity which is not uniform in quality can be graded into classes according to those qualities there can be no organized market of wide dimensions. In the first place, the commodity could not be sold, by sample; and in the second place, all future buying and selling would be eliminated. Men will not contract to buy a commodity for future delivery unless they can be sure of getting the kind and quality which they bargained for. The difficulty of grading tobacco so that a definite contract grade could be established upon which trades for the future might be made has limited the organization of a tobacco market. It is nearly impossible to keep track of individual lots of this commodity and guard it against mixture with inferior lots in the warehouse. Therefore no one will accept a certificate of inspection indicating a certain lot.

27. *State bureaus of inspection.*—To give as broad a confidence as possible to the inspection of great staple commodities, many states have established bureaus where the inspection is done by public officials. This is true especially of grain inspection. In Illinois the State Board of Railroad and Warehouse Commissions has supervision over this feature of the business. Minne-

sota has a similar commission. A certificate of inspection under such circumstances is a guarantee of the grade of the state. This is important in the export trade of Duluth since its grades are higher than the Atlantic seaboard grades of the same wheat. European exporters, therefore, watch with care all shipments from Duluth to see that the same grain goes through the elevators at Buffalo and is loaded on the steamers in New York City without losing its identity.

The method of inspection is much the same in all markets. All cargoes loaded with grain coming into Chicago from country points are promptly reported by the railroad companies to the grain inspectors. These men visit the cars and secure samples of grain that fairly represent the grain in each car. Every car so inspected is then sealed by the inspector. The samples are turned over to the grain merchants to whom the cars were consigned from the local shipping center in the country. The grain merchant displays his samples in the market place of the exchange building and the grain is sent to the elevator. A warehouse receipt is issued upon the acceptance of the grain by the elevator company. This receipt together with the sample of grain becomes the basis for the sale and purchase of this particular amount and grade of grain. When the grain is sold, the warehouse receipt is delivered instead of the actual grain, each new owner endorsing the receipt when he receives it. If the holder of the warehouse receipt wishes the actual grain he can obtain the same by presenting it to the elevator company. Only those firms, however, can issue warehouse receipts that have been declared "regular," that is only such firms as conform to the Board of Trade rules covering the inspection, handling and storing of the grain. The warehouse receipt thus becomes a very

important instrument of trade and a heavy responsibility rests upon the superintendent of the warehouse who has charge of the grain and must keep it from deterioration either by natural or fraudulent means. The various grades must be kept distinct, although the identity of any particular lot may be lost.

The object of grading is to separate a commodity into grades based on differences of soundness, color and freedom from impurities. This applies to grain especially, but other commodities may offer other characteristics which it would be necessary to take into consideration.

Each market has its own standards and as a consequence there are many different grades. There have been many attempts at establishing a uniform grade for wheat that would apply to all markets, but without much success. The tobacco grades are perhaps the most local of the great staple products while the grades of cotton are the most uniform.

28. *Chicago and Liverpool grades of wheat.*—The following grading for wheat in a few of the large markets will illustrate the foregoing statement:

Chicago's "contract grades" of wheat or the basis for transactions in the pit, are No. 2 red winter wheat, No. 1 northern, and No. 2 hard winter. In Minneapolis the contract grade is No. 1 northern. In the Duluth market No. 1 northern is the contract grade, but No. 2 northern may be delivered on contracts at 5 cents a bushel under the price of the former. The contract grade in the Kansas City market is No. 2 hard winter wheat of not less than fifty-nine pounds, but No. 2 red may be delivered at the seller's option.

There are at least nine varieties of wheat deliverable on contracts in the Liverpool market. The wheat coming from all parts of the world as it does makes the

work of establishing uniform grades very difficult. This important business of inspecting and grading devolves upon a special committee of fifteen members elected by the directors of the Liverpool Corn Trade Association. There is perhaps no position in the business world where a man's judgment counts for more than it does in that of inspector and grader.¹ It is the grader's judgment that decides by what standard the various products shall be measured. When one considers the millions of bushels and millions of pounds of products that are entering the market—their selling power in large part predetermined by the inspector's judgment—it is easily seen what great opportunities lie in his hands for changing the purchasing power of large quantities of grain, cotton and other products—through assigning them to one or the other of a number of grades.

¹ The fundamental principle underlying all grading of commodities is to discover the dominant characteristics that give the commodity varying commercial values.

CHAPTER IV

THE EXCHANGE

29. *A typical market.*—We have thus far been treating of the external side of the market and of the various factors upon which a market of modern times must be organized. Taking Chicago as the example, we find that the various market interests not only center in one city but are focused here in one building—the Chicago Board of Trade. Technically, the “market” is at that point. “The country miller of Illinois, the grain buyer of Iowa, the elevator manager of any center, the big Minneapolis miller, the terminal elevator company of Chicago, the exporter of New York, the exporter of Argentina, and the importer of London, Liverpool, Amsterdam and Antwerp—all come here to buy or sell wheat as a ‘hedge’ against transactions in their regular business activities.”¹ To this center too come those men who wish to speculate. The market machinery is thus made use of for other than legitimate trading. At times this speculative trading is of enormous proportions.

30. *Chicago Board of Trade.*—We must now turn to the inner organization of the market—or that part where the transactions take place. The Chicago Board of Trade is generally spoken of as the Chicago market, but they are not the same thing. The Board of Trade is a corporation with officers and a definite business purpose. It owns an exchange building for the use of its

¹ Rollin E. Smith, “Wheat Fields and Markets of the World,” page 300.

members and the corporation is empowered to make and enforce rules concerning the buying and selling within the exchange, but it is in no way connected with the success or failure of the members. The original objects of the association are thus defined: to maintain a commercial exchange; to promote uniformity in the customs and usages of merchants; to inculcate principles of justice and equity in trade; to facilitate the speedy adjustment of business disputes; to acquire and to disseminate valuable commercial and economic information; and generally to secure to its members the benefits of co-operation in the furtherance of their legitimate pursuits.

The Board of Trade was organized in 1848, and in 1859 by a special act of the legislature it was given a charter. By section 4 of the act, "The said corporation is hereby authorized to establish such rules, regulations and by-laws for the management of their business, and the mode in which it shall be transacted, as they may think proper."

The membership numbers between 1700 and 1800 and includes a representative of nearly every important grain commission and elevator company in the country, many of the big millers, some of the New York Stock Exchange members, even a few European importers, several hundred local grain commission men, elevator managers, brokers, several capitalists and bankers, and owners and representatives of the packing houses. Memberships have sold as high as \$4,400, and as low as \$475, the price depending upon the demand for membership seats.

Buyers who are not members of the Board of Trade cannot transact business on the floor of the exchange themselves. They must employ a broker who is a member and must pay a commission for his services.

The rules of the exchange limit the time of trading to the hours between 9:30 A. M. and 1:15 P. M. Any deals outside of these hours cannot have the protection of the exchange.

The transactions on the exchange are of two kinds, though there are many subdivisions. There are the "cash grain" business and the "future" business. Under the former come all the dealings which pertain to the actual grain—wheat, corn, oats, etc.—selling it by sample and transferring it to some elevator for storage. One side of the exchange room is given up to this "cash" business. Here the samples are laid out for the inspection of the various buyers.

The rest of the exchange floor is given over to the future markets. The four points about which the buyers and sellers habitually congregate are called "pits." There are the wheat pit, the corn pit, the oat pit and the provision pit. During the busy time the combined markets present "a scene of activity, intenseness, seriousness and often excitement that gives the impression of impending tragedy, and which is seen nowhere else except on the floor of the New York Stock Exchange, or in the Paris Bourse. During a very active market the wheat pit is crowded with some 350 struggling, shrieking men endeavoring to execute their orders; and at such a time everyone in the exchange room seems to have a realizing sense of the importance of the momentous volume of business that is being done. It is a time when moments are valuable, and a few seconds suffice to complete transactions. This necessitates the greatest possible rapidity and alertness that human beings are capable of, physical and mental, and the aid of all the mechanical appliances that may be had. Orders are continually coming to the floor by telephone and by wire, and messengers, im-

pressed with the demand for speed, are delivering them. A large force of telegraph operators occupies one corner of the exchange room. From the time the gong sounds at 9:30 A. M. until it announces the close at 1:15 P. M., when there is an active market there is no time or thought for anything but the business of the moment. What happened a minute ago is past, and that which is to be done a minute hence will be attended to when it is reached.”¹

The pit traders are chiefly made up of representatives of the numerous commission houses. There are also independent traders who act as brokers and will execute orders for any member on a commission basis. Others still trade only for themselves—they are spoken of as “scalpers” or “floor traders.” They are speculators. The unit of transactions in the pit for wheat is 5000 bushels. When a trade is made without any mention of the amount, this number of bushels is understood. All trades of greater amounts are done in multiples of the unit. If a broker offers or bids “10,” “50,” or “100” it is understood that 10,000 bushels, 50,000 bushels, or 100,000 bushels is meant.

31. *Two classes of buyers.*—The orders received by the brokers in the future markets come from every conceivable source. Broadly speaking, however, these orders may be divided into two classes. (1) Those which are sent by men who intend to receive or deliver the actual grain at sometime in the future. They take advantage of the market which offers them an opportunity of insuring themselves against loss of profits due to a change in the price of some commodity upon which their business depends. This method of insurance is

¹ “Wheat Fields and Markets of the World,” Rollin E. Smith, page 303.

termed "hedging"¹ and is generally conceded to be a legitimate business act. (2) There is another class of orders received, however, which the senders never intend shall be filled by receiving or delivering of the actual grain. They expect to get rid of either obligation by selling on a basis of "differences." That is, instead of delivering the actual commodity which the contract calls for, the seller, for example, gives the buyer the difference between the price of the commodity on the delivering date and the price agreed upon when the contract was made. This class of orders is called speculative, as it is sent in by men who buy and sell without expecting to use the grain or even to see it. They hope to "sell out their trade" at an early date and to reap a profit by a change in price.

32. *Speculation and gambling.*—It would perhaps be unprofitable to try and classify the various grades of speculation. In one sense every trading transaction is a speculation, and the line between the "legitimate" trade and the gambling transaction is no more distinct than that which separates a bad from a good act. Much depends upon the intention, and only the man himself is


¹ A "hedge" is a sale of a commodity for future delivery in order to avert an anticipated loss through a change of price. A miller in September makes a contract with a flour exporter to deliver flour in December. He bases his price for the flour on the September price of the wheat. If the price of wheat rises in December it is evident that the miller must lose money, since he will pay away his profits and more perhaps in purchasing the December wheat to make the flour. He can insure his milling profits through "hedging." He proceeds thus: Having taken the flour order for December, he purchases the wheat and orders his broker in the pit to sell an equivalent amount of wheat for December delivery. Now if the price goes up when the miller purchases the actual grain to make flour in December, he gets it at the September price. This part of the transaction gives him a profit; but he must also buy wheat to deliver on the short sale which he made in September. This gives him a loss. The gain and the loss, however, are equal and therefore the change of price did not affect his milling profits on the flour.

in a position to analyze this, while at times he is doubtful as to his own intentions. Still society has certain practical standards which help one in deciding what is and what is not right, and also what is and what is not gambling. In certain stages of economic development there are more necessary risks to be taken than in others. The men who take these risks by investing their capital are not generally condemned or branded as gamblers. Society benefits through the efforts of these men. The early insurance companies assumed the risks in connection with long sea voyages. Very soon, however, a class of risk takers arose who did not make good the losses due to accidents on the sea but simply used the sailing of a ship as an incident upon which "to make a bet." These men assumed unnecessary risks. What was one bettor's gain was the other bettor's loss and the fate of the ship only supplied the incident. Society gained nothing from the betting of these persons, and they were justly condemned. Many persons follow the same method to-day in assuming unnecessary risks. They simply bet on the outcome of the price movements of various commodities or securities. They do not study the business conditions or the crop situations. They simply "take a chance" blindly and ignorantly. Risks are taken which do not help society and they are condemned and branded as gamblers. These gamblers take advantage of the market machinery of the great stock and produce exchanges and thus often bring these latter into bad repute. Every purchase and sale in the pit affects prices. If the gambler supports a price which is not in accordance with the economic conditions he will ultimately lose, but his ignorant buying or selling has in the meantime given artificiality to the market, and all unnaturalness is bad. Especially is it con-

demned when such activity gives uncertainty as to the future bread supply. Sentiment of this kind has virtually eliminated this feature of future trading from the London wheat market.

33. *Defense of speculation.*—The exchanges have been criticised for not abolishing gambling from their midst, but the brokers reply that they cannot distinguish between the orders which they receive. Their orders are to buy or sell. If an order is supported with the requisite capital, the broker does not pretend to discover either the intention or the business method of the customer. The economic argument in support of the future trading in the wheat markets has its basis in the hedging operations of the elevator companies and the mills and other grain interests. The local elevator companies, for example, place their hedges as soon as they begin to accumulate stocks of grain. In the Northwest this happens about the first of September. Having paid cash for their wheat and put it in the elevator they order their broker to sell for December delivery. If some of this wheat is delivered by the elevator company when December comes round the hedge of course is not bought in; but the wheat that must be carried still further into the year must again be provided for. The December sale is bought in the pit and an equal amount sold again for May delivery. The number of these hedging transactions based upon elevator companies are considerably increased because of the organization of the elevator business. There are two kinds of elevator companies. Beginning with the "out-of-town" elevator companies which are buying or selling against their cash transactions in grain, there is a steady volume of hedging sales running through the months from September 1st to January 1st. But these hedges are

again bought in when the wheat is sold to the elevators in the big markets. Now when these terminal elevator companies buy the cash grain they go through the same process of hedging as did the out-of-town elevator companies. They sell in the pit against purchases of cash grain from the country elevator and buy in the pit as they sell the cash grain to millers or exporters. It is now the miller's turn to use the conveniences of the pit. Having bought the wheat in the open market from the elevator company, supposing that flour has not as yet been sold against it, they protect themselves until such a sale is made by immediately reselling the wheat in the pit. Then when flour is sold the hedge is bought in again.

The exporter follows the same methods of insuring his purchases, and the amount of such business is very large, but owing to the manipulations practiced by certain powerful speculators in some of our large markets this class of business has steadily declined. 

34. *Course of an order.*—All out-of-town orders are sent to commission houses and are executed by the pit traders who represent the latter on the floor of the exchange. To facilitate this business many commission houses have branch offices and agents in other cities where orders are taken and sent to the central office over private wires. The Chicago Board of Trade offices have private wires running to Winnipeg and Minneapolis and Duluth on the north, to New York City and many intermediate points to the east, and to Kansas City, St. Louis and other points to the west and south. Orders from such sources are generally received directly by the commission house and sent to the exchange floor immediately.

35. *Two kinds of traders.*—The pit traders may be

divided into two very natural classifications—(1) those who buy with the expectation that there will be a rise in prices in the future and (2) those who sell with the hope that when the time comes to make delivery the price will have fallen, and thus enable them to fill their contracts at a lower figure than the one stipulated. These two classes are respectively called “Bulls” and “Bears.”

36. *Method of payment.*—The methods of payment in the board of trade are made to conform to the system of future trading. It would be a bungling system indeed if every purchaser had to make payment in full every time the price changed during the time the contract was running. It is possible, however, by a system of differences to make only partial payments until the final delivery is made. The amount paid over each day would therefore depend upon the price fluctuation. This is shown in the following supposed case quoted from Professor Sparling's excellent chapter on the Exchanges in his book on “Business Organization.”

Suppose on March 10th A¹ sells B 5,000 bushels of wheat for May delivery at 95 cents. On each day thereafter this price fluctuates, and as the price rises above 95 cents, B, having the wheat, would thus be the gainer as the market advances, and A the loser; so A would pass checks to B for differences in value figured on the basis of the closing market prices each day. As market prices lower, B would pass checks to A for differences shown. Let us suppose that by April 20th the price had gone up to 97½ cents per bushel. Then A would have paid to B a total of 2½ cents per bushel, and B decides to sell to C, who finds on May 1st that the price is still 97½ cents. A would then deliver the wheat to B in the form of warehouse receipts which call for the actual wheat, and for these C would give A payment for the total on a basis of 97½ cents per bushel; but

¹ In this illustration, A might be designated a “bear” and B a “bull.”

he has already paid B $2\frac{1}{2}$ cents a bushel, so, while the wheat costs C $97\frac{1}{2}$ cents, A realizes but 95 cents for it, B having taken the difference. B is in this case purely a speculator, having judged that conditions of supply and demand would bring about higher prices, and acted on his judgment. B may have, however, sold to D, and D to C, and C to K, and K to X, of the same wheat between March 10th and April 20th, each of these traders having gained or lost as the market price fluctuated from day to day. These various parties, whether trading directly for themselves or through brokers, were thus speculators, though not one of them in selling knew whether or not he was selling to C the actual receiver of the wheat, or the genuine speculator. When B sells to D, he closes accounts, and withdraws from the transaction except as shown by the records.

37. Margins.—This method of settling differences gives rise to trading on “margins.” The broker who transacts the actual business in the pit requires of each customer a deposit of a sum of money sufficient to cover the ordinary price fluctuations. This is on the basis of so many cents per bushel or other unit of product. The broker does this because he is personally responsible to the clearing house of the Exchange, and if he would avoid losses he must compel his customer to keep up his margins. The books of the broker and those of the Clearing House record the transactions until closed. Another method sometimes employed for making final settlement is that of “ringing out.”

Let us suppose that A sells to B a given quantity of a commodity of contract grade at a price of 90 cents per unit. The ownership of this is evidenced by a warehouse receipt. The future market closes that night at 91 cents, so A passes to B a check for one cent per unit. The next day B may sell to C, and he, through others, to K, and the market closes that night at $90\frac{1}{2}$ cents. Checks are passed between all parties for differ-

ences between prices at which purchases and sales are made, with K having paid $\frac{1}{2}$ cent to J. The process continues up to X, who buys when the market is at 95 cents. Differences have been passed, until X has had to pay to W, from whom he made purchase, 5 cents per unit, and to A 90 cents per unit. In this way the ring is made complete, each trader intervening between A and X being able to secure his profit or pay his loss promptly and obviating the necessity for the clearing house.¹

38. *Clearing-house.*—This is the most improved method for facilitating the settlement of contracts. It resembles bank clearing-houses in large financial centers. The economic importance of the clearing-house system rests in the saving of time and friction which arise in the settlement of a large number of accounts by affording a central office and an organization of trained officials where the numerous transactions can be cleared. The clearing-house is an independent organization with its own set of officers, rules and regulations. Its function is to keep a record of the sales and to open up accounts with the exchange members.

In order to facilitate the operation of settlement of contracts by offset each member is required to keep a "settlement book," in which shall be entered the names of parties with whom settlements have been made, and the dates and terms of the trades included in such settlements, and the terms of such settlements, and the prices at which the commodities were originally sold or purchased, and the amounts due to or from him or them on each separate settlement, also the net amount due to or from him or them on all settlements.

When the business day ends the members go to the clearing house and pass in their accounts or "reports."

¹ S. E. Sparling, "Business Organization," page 140.

If the clearing house sheet as made up shows a credit to the owner of the "report" a draft for the correct amount is drawn on the clearing house. If the day's dealings have netted the member a loss he passes a check for that amount to the clearing house. The clearing house performs the settlement and obviates the necessity of each member hunting out those with whom he has made contracts during the day. In the above supposed case.

When C traded with B, then C's name appeared at the close of that day's business on the clearing-house records, and when C made an opposite trade with D, then D's name appeared on the clearing-house records, but C's obligations were closed and his name dropped. This process continued, showing always the original trader A and the last trader up to X, who, on delivery day, was shown to be the actual purchaser of the commodity. The clearing-house clerk would pass these promptly to Mr. X, and instruct him to make full payment to Mr. A, who thus becomes the new owner of the commodity.¹

39. Rules, regulations and management of the exchange.—So far in the discussion we have been especially concerned with the organization of the exchange from the point of view of function. It will be of interest, however, now to examine the organization's rules and regulations and management. The examples and illustrations have been those belonging to the produce exchanges, but the same general outlines apply to the stock exchanges.

The distinction between the two is only in the character of the trading. Each is composed of a group of traders who agree to abide by rules and regulations governing the sale and purchase of agricultural products or securities. The following are the chief produce ex-

¹ Sparling, "Business Organization," page 190.

changes in the world: in the United States—Chicago Board of Trade, Minneapolis Chamber of Commerce, New York Produce Exchange, New York Cotton Exchange, New York Coffee Exchange, Duluth Board of Trade, New Orleans Cotton Exchange, Live Stock Exchange of Chicago, Merchants' Exchange of St. Louis, and Richmond Tobacco Exchange. In Europe are the London Corn Exchange, and the "Baltic," the Liverpool Corn Trade Association, the Liverpool Cotton Exchange, the Manchester Cotton Exchange, the Liverpool Tobacco Market, the London Wool Market, the Bourse de Commerce of Paris, the Bourses of Berlin, Hamburg, Amsterdam, Antwerp and Budapest.

The organization and methods of these various exchanges differ in different countries, but those of the United States are all similar. The associations are incorporated under state laws. They are given power to enforce their rules and regulations in disciplining their own members. Some exchanges have powers of a judicial nature. Their charters permit them to acquire limited property. Among their most important powers is that of selecting, inspecting and grading those commodities admitted to the exchange. The certificates of such inspection are binding upon all members.

The officers who are to carry on the business management of the association and who enforce the rules and regulations consist of a president, vice-president and directors. Together these constitute the board of directors. These officers are elected by the members of the association. In the United States memberships are limited in number and are exclusive. In some of the European exchanges, however, membership is open to anyone who wishes to trade.

The president is limited in his power as the executive

head, but he can suspend temporarily any member for a violation of the rules. The board of directors is the chief authority. With them rests the responsibility for the business and financial policy, the chief appointments, the framing of the rules and regulations and the fixing and supervision of the grades. The appointments subject to the board are those of the secretary and assistant, the treasurer, the inspectors, weighers, measurers and gaugers together with the necessary working staffs. In addition to the president's power of suspension the board can expel any member for violation of the rules covering the settlement of contracts or for being guilty of "unmercantile" dealings. Any member in regular standing subjects himself to the rules if he accepts orders and acts for a suspended member. It is to this board that the warehouses must apply in order to obtain certificates of regularity.

The board appoints many committees, but only two can be mentioned here. One is the committee on arbitration. Disputes over contracts and settlements are brought before this committee. The parties to the complaints may take an appeal to the committee on appeals, where the case is reviewed. Its decision is final if the parties to the controversy have signed an agreement to abide by the decision. If not, then an appeal may be taken to a regular court.

There are also a few rules protecting the traders which it is necessary to mention. (1) A member is held personally responsible until the principal for whom he acts is made known. (2) A broker cannot designate the name of any person or firm as the principal unless the member is in regular standing. (3) The rates of commission are fixed. Of course they vary with the commodity. Members get a rate which is one-half that

paid by outsiders. In order to keep non-members from getting the benefit of the member's rates, a rule prohibits any member from "clearing" any trade not for his own account. (4) No person can represent two firms in the same transaction. This is to prevent the "crossing" of orders.

40. *Complexity of the market forces.*—In studying the market, its function and its organization, one is struck by the great number and the complexity of the influences which center here. One may well wonder how any concrete expression may be given as a resultant of all these commercial forces. Nevertheless, every moment during the trading hours, the resultant of these influences may be traced by the movement of the price. To-day, therefore, the most perfect organization for the registering of prices is found in the exchange. It is here that the keenest minds and the most recent methods of gathering and disseminating news are concentrated. That there is still much room for improvement is evidenced by the prominent place which speculation holds in the transactions, for speculation thrives on uncertainty, and uncertainty is simply another expression for lack of knowledge. The advantage that one speculator has over another rests in his more accurate knowledge. Therefore the attempts of speculators to use every means available for gathering information tend to eliminate speculation. This may be a long process, but in the meantime the producer and consumer have the advantage of timely information pertaining to the great economic factors of supply and demand. It is largely due to the speculator that modern commerce has made such large gains in those important qualities of certainty, regularity, economy and sensitiveness. The market reflects

any change from the standard set at a particular time for any one of these qualities. The telegraph and the Atlantic cable have made the markets what they are to-day. By their introduction the old standards of certainty and sensitiveness had to be changed. Before the first Atlantic cable was laid it cost about 3 per cent to get cotton through the hands of the commission man and the broker; but within a dozen years the charge was reduced to 1 per cent. The old consignment system was destroyed. So sensitive has the commercial world become that a cent's difference on a bushel of grain, or a sixteenth of a cent's difference on a pound of sugar, will change the course of commerce in those commodities from one side of the globe to the other. It is only through the organization of the market that such slight changes can be so accurately registered.¹

¹ Clive Day, "A History of Commerce."

CHAPTER V

MARKETING OF MANUFACTURED GOODS

41. *Attempts to develop a special market.*—Attempts have been made to organize the market for manufactured goods along the same lines as that of the produce exchanges. The Manchester cotton goods exchange is an example. Here is an attempt to put the marketing in the hands of an organized body of traders holding privileged rights as members of an association, that is, an organization controlling the inspection, grading and trading of a manufactured good. In the Manchester exchange building the manufacturers and brokers meet daily and by so doing a development of better standards of grading and more uniform values is noticeable. Philadelphia attempted to introduce a similar exchange, but so far in America little has been done in this direction. The manufacturer has sought the customer either through the wholesaler and jobber or directly by establishing branch houses and agencies.

42. *Manufacturer and middleman.*—The earlier method made use of the middleman, but the modern organization of production has compelled the manufacturer to look for means by which he may strengthen his control over the market in order to keep his productive force profitably employed. The selling organization has therefore been changed. It is no longer left to the sole control of the wholesaler. The manufacturer often deals directly with the retailer or the consumer. He can thus keep in touch with the market's demand and this

enables him to gauge his factory output. The wholesaler by his position has forced the manufacturer into a dependent position. If the middleman found it profitable to change from one line of goods to another, the manufacturer who had depended upon him for his market was left helpless. Likewise the middleman often forced unfavorable trade compacts upon the factory management.

One of the first steps taken by the competing manufacturers was to curtail the losses due to competition through a consolidation of their selling interests. Thus one sales department took the place of several, or the market was divided and all matters of common interests of the several firms were determined according to a common policy. The factories retained their own identity so far as all matters of production were concerned. Before 1903 the International Harvester Company was one of the best examples of this policy. For fifty years the harvester kings fought one another in the open market. Out of two hundred companies which had fought for market supremacy only a dozen were left in 1902. The first consolidation in the harvester business was effected in 1867.¹

Other examples of associations for division of territory are those of the union between the Imperial Tobacco Company of Great Britain and the American Tobacco Trust, the English Sewing Cotton Company, the American Thread Company and J. & P. Coats, Limited

¹ After a severe reaper test in the grain field between William N. Whiteley and Benjamin H. Warder, the latter proposed to Whiteley that they quit fighting and work in harmony.

"Give me the right to make your reaper and I'll pay you \$5 apiece for all I can sell," said Warder. "It's a bargain," responded Whiteley. They did not merge their companies, but they divided the United States into three parts—one for Whiteley, one for his brother, and one for Warder.—"The Romance of the Reaper," by H. N. Casson.

—in the case of the tobacco trust, each was to be left to exploit its own country, while the thread combination was to divide the cotton-thread trade of the world among them. The weak points in this form of association rest in the charges and counter charges of encroachment of the companies upon one another's territory.

Perhaps the highest organization of this kind is represented by the kartell of Germany. Here the associated firms are left to themselves in matters pertaining to production; the function of marketing the total product is entrusted to a separate organization controlled by a committee of the association. All orders are sent to the sales agency, which distributes them among the firms, reserving to each as far as possible its old clientèle and allocating new business in the same proportions as the old.¹

An example of this method is found in the association called the Central Thread Agency, which marketed the goods of Messrs. Coats, Chadwick, Clarke, and Brooks for some years before these firms amalgamated. After the union of these companies the selling association was still maintained. The relation of the association to the manufacturers was changed, for now the agency became a subsidiary company and the common ownership of the capital became the controlling factor in the management. The Standard Oil Company, the Tobacco Trust and the Sugar Trust all used this method for some years but hostile legislation compelled them to reorganize this method of selling.

43. *Agency methods of selling.*—Apart from any connection with the process of consolidation both small and large firms are extending their control over the sale

¹ "The Trust Movement in Great Britain," by Henry W. Macrosty.

of their output by establishing some form of agency. It is the common practice for manufacturers to establish branch offices at some of the most important points of distribution. These agencies may be supported wholly or in part only by the factory. If the corporation is a large one and covers a large section of the country by its sales, some central city, such as New York, Chicago or St. Louis, is selected for the main office, having as its function the supervision of the agencies throughout its territory.

These agencies may be in the form of wholesale or retail houses. The character of the trade must determine which system is adopted. The large meat packers distribute probably 99 per cent of their dressed meats and a large percentage of their packed goods through their own wholesale houses, which are established in different cities. The packers' wholesale branches sell only to retailers and not to consumers. The outcome of this policy has been to annex the local butchers to the sales departments of the large packing concerns. There are two exceptions to be noted in the above statements, and they are important since they show how closely interwoven into the system of distribution is each method and form of reaching the market. The packers put some of their packed goods on the market through wholesale grocery stores which are not owned by them; and some large buyers such as hotels are able to buy directly from the packer's wholesale house and need not necessarily buy through the retail butcher. Illustration of the growth of this practice is seen in the cases of the three largest packing houses.

The Armour Packing Company controls more than fifty branch houses throughout the Western and Southern states. In the eastern and northern sections of the

Mississippi Valley and along the Atlantic coast the company controls 226 branches. Sixteen of these belong to the Omaha territory and 210 are controlled from Chicago. The Nelson and Morris Company have their branch houses distributed as follows: in Pennsylvania, 17; New York, 13; New Jersey, 6; Massachusetts, 6; Michigan, 6; Arkansas, 6; Connecticut, 5; Ohio, 5; Illinois, 3; Minnesota, 3; Virginia, 3; Georgia, 3; Indiana, 2; and one each in Maryland, Washington, D. C., New Hampshire, Maine, Wisconsin, Alabama, Louisiana, Tennessee and Missouri. Swift and Company controls from its principal centers of Chicago, Kansas City, South Omaha, South St. Paul and East St. Louis more than 180 branch houses.

Such a system as this would have been impossible before the invention of the refrigerator car and the extension of the railroad to every center of meat consumption. The "route car" has taken the place of the local slaughter house and in most cases the local butcher shop has become a distributing agent of the large packer.

Another example of direct selling, which goes a step nearer the consumer, is furnished by the National Biscuit Company. This concern is an amalgamation of several independent manufacturers, and sells most of its product directly to the retailers. They have distributing agencies in most of the big cities of the United States and deliver their goods by means of their own equipment. In this respect, however, the National Biscuit Company is an exception to the general policy followed in the marketing of grocery products. These goods are handled through jobbers, and a very slight control over the retail prices exists on the part of the manufacturer.

The motives impelling the adoption of direct selling

by the National Biscuit Company is interesting. A jobber's salesman can handle with considerable ease ten or twelve leading lines of biscuits, but when it comes to selling 200 kinds an expert is needed. The salesman must furnish much of the market experience that the merchant should possess himself, but owing to growing demand and shifting tastes the grocer is dependent upon a specialist who can supply this needed market information. The National Biscuit Company's salesmen must be able to advise the grocer what lines he should keep in stock and in what quantities, hence the salesman must be thoroughly acquainted with the popular demand and also the keeping qualities of the biscuits. The company always stands ready to take back any excess stock which the grocer may have left on his hands and instructs its salesmen in the art of "window dressing" in order that the grocery store may have expert advice in arranging its displays of biscuits.

The sale of tobacco products offers another illustration of direct selling. The American Tobacco Company sells almost all its product through jobbers, with the exception of certain sections of the South where long credits are the rule. The company has large wholesale houses in the principal cities and does the selling through them. In the country districts and small towns the company's goods are handled by local jobbers or independent wholesale grocers or druggists. These latter are very important factors in the tobacco trade and hence it is the policy of the "trust" to avoid offending them by selling directly to the retail trade.

To meet the "independents" the "trust" pushes its business into the retail trade by stimulating the jobber. The quantity system is thus applied very effectively. By this method the jobber must buy a certain supply of

tobacco in any one year exceeding in amount that bought in the previous year. Unless he sells this stipulated amount his profits are nothing, since these depend upon the rebates or discounts connected with the system. By another method the company allows the jobber to push its interests upon the retailer. This is called the method of direct shipment. The jobber may obtain an order, but the trust ships directly to the retailer; by this means, especially if the order be a large one, the expenses may be reduced and the benefit given to the retailer through a slight reduction of cost. Another phase of the quantity system is seen in the practice of the manufacturer establishing a jobber's list. Under this practice any retailer who can buy in wholesale quantities can secure jobber's rates. The effect of these policies has been to reduce the jobbing business. To meet the attack upon their interests the jobbers have moved into the retail field themselves. They did it by establishing their own retail stores. The greatest development in this direction has been in the cigar trade, the United Cigar Stores Company and the National Cigar Stands Company being the present exponents of this multiple store policy on a national and international scale. The origin of the latter was an outgrowth of the jobber's attempt to keep control of the market. Its object is to do the buying for the drug store and generally to supervise the methods of buying and selling their cigars.

44. *Selling directly to customers.*—The organization of the selling business is not always impelled by the desire to control the market more firmly or by a wish to save the middleman's profits. The method of transportation or its costs sometimes influences the system of distribution. The chemical industries present such a

case. The proportion of weight and bulk to value in this line of goods is often very large. Consequently there is a saving in expenses if the goods can be put as directly as possible into the consumer's hands.

Whenever the quantities ordered warrant it the manufacturer ships directly to the consumer. Consequently the jobber never carries a large stock. There seems to be, however, a strong connection between dealers and customers, and the manufacturer is compelled to keep in touch with the jobber. The latter, therefore, receives a commission for all the orders sent in, and the company generally protects the jobbers by charging the outside buyer the wholesale price plus the commission. If a dealer has been appointed agent for a certain district the company credits all orders to him though some buyers may send orders independently of their agent. However, there are exceptions to this policy in the chemical trade. On the one side will be found, for example, a large alkali manufacturer who appoints one firm general sales agent, and this firm looks after the sub-agents. On the other side, there is a big firm of medicinal drug manufacturers in Philadelphia which omits the jobber entirely and sells only to retail dealers. A small reduction is allowed in the price on large orders.

Another trade that shows peculiar conditions connected with transportation is the oil business. The newer method of distributing oil is by the use of large tank cars. Only those dealers, therefore, can handle the commodity who have the necessary tank apparatus for the oil after it is removed from the car. This system has helped to displace the middleman. To-day only about 10 per cent of the dealers are outside the control of the Standard Oil Company. The majority of these

independents are wholesale grocery concerns supplying oil in barrels to a few customers. In some cases the Standard Oil Company undertakes the delivery of oil to the household consumer by means of tank-wagons. This method is adopted where local dealers are under the influence of a rival company.

A special cause for removing the jobber and "going direct" exists in the iron and steel trades. The commission agent, or jobber, was able, owing to the character of the goods, to quote a price for future delivery below that quoted by the producer. Of course, he counted on a fall in prices before it was necessary to cover his contract and often he induced a fall by his attitude, if not by his manipulation. This illustration is important in another respect in showing that speculation attaches itself easily to a commodity that has standard grades and a wide market, and a special market is not always necessary to support speculation as a factor in trading. In this case the manufacturer felt his control over the price of his product growing very weak. The jobber by quoting lower prices for a certain quality of iron set other dealers to doing the same thing. It was only a matter of time, therefore, when the manufacturer would be compelled to revise his prices. To avoid this he refused to sell the jobber and hence the latter have been decreasing in numbers during the last twelve years.

In some lines of business where the jobber is still thoroughly entrenched it becomes advisable for the manufacturer to sell directly to the retailer. Hardware is sold almost entirely through jobbers, but sometimes in order to push a novelty or a new specialty the manufacturer assumes the expense of creating a market for it. The jobber seldom objects to this, for as soon as it "catches on" the retailer must buy his further supplies

through the jobber. In the case of such mechanical specialties as typewriters, cash registers, sewing machines, etc., the manufacturer generally establishes agencies or branch houses throughout the country and by so doing brings the goods directly to the consumer.

The boot and shoe industry has been under the dominance of the middlemen so long that only in a few instances have the manufacturers been able to break away from their control and find a market themselves. Some of the stronger firms have gone to the consumer directly through their own retail stores; but where this has been impossible they have reached the retailers through their own disbursing agencies. The boot and shoe trade also illustrates a general tendency in the order of displacing the jobber. It is the finer grades of shoes that the manufacturer puts upon the market himself, the coarser qualities being still disposed of through the jobber. Thus a factory may put out a high class shoe under the manufacturer's name, while the poorer grades of shoes are placed on the market by the jobber, stamped with the latter's name. Some brands of shoes have become so well-known under the jobber's name that he can demand from the manufacturer the surrender of his own trade mark. This peculiarity has produced two interesting developments. In one case where the manufacturer refused to comply with this request the jobbers went into the manufacture of shoes on their own account. Again, one large manufacturing firm adopted the plan of doing its own jobbing because the jobbers refused to handle shoes under the manufacturer's name.

This same method is also found in other industries. Some of the independent manufacturers of tobacco place their whole output on the market through some large jobber who uses his own brands. Thus we have

the manufacturer's brand and the jobber's brand.

45. *Selling through commission houses—broker and converter.*—The textile industries display more varied forms and methods of marketing their products than most other lines of business. Some of the principal factors determining the organization of the selling methods are the extent of territory over which the sales must take place and the method of financing the factory operations. Cotton, woolen and silk factories show different degrees of approach to the direct method of marketing goods. The middlemen in the cotton and woolen trade are the commission men, the brokers, the jobbers and the converters, the last having functions belonging both to the producer and the middleman. The converter takes the rough weave or "gray goods" and converts them into grades. If he is buying on his own account the goods are then turned over to some finishing house where the bleaching, folding and coloring takes place. The converter generally has a New York office as this is the market for printed goods.

The commission men are supported in these trades principally for two reasons. In the sale of cotton goods the buyers are so scattered and the distances so great that it is hardly possible for the mill to have its own salesmen. In the sale of the yarn, the spinners, especially in the South, are financially weak and they rely upon the commission houses to furnish them with capital; and again, although yarn is a simple thing to sell, nevertheless there is economy in having one firm of commission men deal with a manufacturer of cotton goods. The latter must buy more than one style or kind of yarn and he prefers to do this by dealing through one firm rather than through several. But the strong tie between the spinner and the commission men is the financial one.

However, as the spinners of yarn become financially stronger there is a tendency for them to break away from the commission house and to employ brokers in finding a market.

The broker's business is to bring the buyer and seller together; he receives for this a brokerage of $1\frac{1}{2}$ to 2 per cent. He is not as yet a strong factor since comparatively few goods are sold this way, and these are chiefly of the kind that are of comparatively high grade. The print cloths of Fall River are the chief line of goods sold in this way.

The commission business, on the other hand, is a very essential part of the system. In many of the textile industries the manufacturers have had barely enough capital to supply the factory needs, let alone the selling end of the business. They have relied chiefly on advances made by commission houses. This applied to both the New England and the southern mills until recently. The method of advancing money is done by allowing the manufacturer to draw drafts against consignments to the commission house, amounting to from 70 to 90 per cent of the value of the goods. The former are now becoming more independent. In contrast with the broker, therefore, we find the commission house performing several functions. They store the goods, advance money on them, sell them in their own name and guarantee payment of the accounts to the manufacturer. The commission man's income is represented by a 5 per cent commission, interest on advances, an allowance for insurance and a bonus of one or two per cent in the form of a discount.

In the silk business considerations are different. The territory to be covered is not so extensive nor is the trade so scattered. Accordingly it is possible for the

big mills of Paterson and Jersey City to have their own selling agencies in New York City, where the buyers of the country may come to make purchases. Wherever it seems advisable to put salesmen on the road, the companies do not find it impossible to cover the territory since the buyers of silk goods are limited in number as compared with the market for cotton goods.

The woolen mills stand next in dispensing with the commission house but as yet only the larger mills have established selling agencies of their own, and these like the cotton factories are for the disposal of the finer goods. A change in the demand for ready-made clothing has helped the development in this direction since it concentrated the buying of woolen cloth. When tailor-made or home-made clothing was the prevailing kind of wearing apparel, the buying was scattered and the market was difficult to cover. Now the output of a whole mill can be taken by some of the large ready-made clothing establishments. Similarly in the case of carpets the manufacturers sell their own product directly to the jobbers or the large retailers. This is especially true in Philadelphia. One of the most notable examples is that of the American Woolen Company which has dispensed entirely with the commission house and sells directly to the wholesalers and the manufacturing clothiers.

Other examples are those of the makers of textile specialties, such as the shirt, collar and cuff manufacturers of Troy, N. Y. In the hat business several of the largest firms have offices in New York and other central cities. The J. B. Stetson Company also employs a force of traveling agents to visit the retail traders throughout the country.

46. *Mail-order method.*—In regard to the mechanism

of direct selling it is well to remember that it is only one of the means whereby the manufacturer attempts to control the market. So far we have taken only the various agency forms of going directly to the wholesaler or to the final consumer. There is, however, another method of reaching the market directly from the factory, and that is by the "mail-order" method. In this case the catalogue, the newspaper, the magazine and various advertising schemes invite the buyer to send directly to the factory, and the manufacturer sends back the filled order through the post, by the express company or by freight. In the list of industries following this method may be found ready-made clothing manufacturing, furniture making and boot and shoe manufacturing. This method is not confined to the manufacturer but is adopted by some of the largest distributing firms. The largest of these are the Montgomery Ward & Company and Sears, Roebuck & Company of Chicago. These houses deal in a large assortment of goods and their business is strictly retail by mail. No goods are sold over the counter.

The development of this system in both the United States and in England is hindered by outside factors. In the United States there is no parcels post system and in England there is an absence of any "cash on delivery" system. The latter is probably the more difficult to overcome, since it involves the changing over of a whole nation's trading custom, while in the United States it simply means the extension of a government policy already far developed in the rural free delivery of letters. The extension of the "mail-order" business is also opposed by the local retailer for in most cases it means his elimination even more effectively than was the case when the large department store was introduced. But

the "mail-order" house must always be handicapped by the distance to be covered and the consequent delay in filling the orders, as well as the dependence upon the more strictly cash terms in such dealings.

47. *Manufacturer's retail stores.*—In reviewing the methods of direct selling by the manufacturer one is impressed by the increasing growth of the retail stores owned by or controlled by the manufacturer. It might be well therefore to examine this development more closely. In dealing with the subject it might be more convenient if we classify the retail stores established by manufacturers. In the first place it should be noted that certain products are virtually excluded from this method of selling. Such, for example, is sugar. The character of the demand for this and like commodities compel a system of distribution which meets the great mass of consumers at every point possible. This is best done through the ordinary dealer. If on the other hand the product is such that the customer will seek it in some particular district, then the manufacturer may be able to stand the expense connected with the establishment of branch stores for the retailing of the goods. Specialty goods, such as the typewriter and others mentioned above, come first under the classification. Accordingly we find these products sold in retail stores and exclusive agencies owned by the manufacturers. Connected with this method are the local repair departments. One large camera company markets its whole product through the exclusive agencies.

In the case of boots, shoes and hats we have a different class of direct selling. The distinction is marked (1) by the fact that the retail store is devoted solely to one line of goods, and (2) by the fact that these stores are located in shopping districts. The exclusive boot

and shoe store was a feature of the distribution system before the manufacturer entered the retail field. He simply carried the narrowing process a step further by limiting the stock carried to his own brands, excluding all other lines of shoes. The principal firms following this method are the Walk-over, Douglas, Regal, Crawford, Emerson and All-America Shoe Companies. The W. L. Douglas Shoe Company maintains seventy exclusive stores and the Regal Shoe Company over one hundred. These companies present only examples of tendencies, for if the boot and shoe trade be taken as a whole it will be found that the great bulk of the business is done through jobbers scattered over the United States. One advantage which these large companies gain by "going direct" is that the advertising which they do on a large scale helps the company directly and permanently.

The establishment of retail stores by the American Tobacco Company was the outcome of a policy to meet competition. At first the company sold to retailers with certain restrictions. For example, the retailer was forbidden to handle certain competing goods like cheap cigarettes. He was also forbidden to quote his own prices. It was not until 1901 that the American Tobacco Company began to fight for the cigar market. Up to this time they had left this trade to others. Business policy forced the company to gain control of the Cuban output, but they found the independent companies in possession of the market for cigars. The trust at once began a policy of marketing its own product through its retail shops and distributing houses. The subsidiary company through which the selling is conducted is the United Cigar Stores Company, which today has nearly five hundred stores in the larger cities of

the United States. Although these stores are carefully selected as to location—a corner or a frequented business section—nevertheless many important sites for this trade were already occupied by drug stores. To reach these centers it was necessary to form two other subsidiary companies. The first was to provide drug stores with cigars and fixtures at a cheaper rate than could be obtained from competing wholesale companies. This was the National Cigar Stands Company. The second subsidiary company—the United Cigar Stands Company—was to obtain possession of the small candy store, the newspaper stand and other points of distribution where the maintenance of an exclusive tobacco store would not pay. The chief restriction put upon the distributors was that they must handle trust goods only.

The chocolate and candy market is reached much after the same method as that of the tobacco trade. The manufacturers make use of their own retail stores and also those of the general candy trade. Thus “Huyler’s” keeps a partial control over all its products. It has some forty stores of its own located in the larger cities; but where it must go outside and distribute through the general trade, the company only sells its goods in sealed packages.

Sometimes large concerns keep a retail shop or two going for the purpose of advertising, and sell the bulk of their product through the ordinary channels of trade. Large publishing houses often carry on a retail trade in New York and other large cities; John and James Dobson own a shop in New York, where their carpets are kept on display and for sale; the Gorham Company of Providence, R. I., maintains a retail store in New York City for the sale of silver and bronze ware.

48. *Reasons for the declining importance of the mid-*

dleman.—The movement of the manufacturer toward emancipating himself from the control of the middle-man is bringing several important changes in its path. One naturally points to the decreasing importance of the jobber and wholesaler in the distributing business. This man who once usurped the title of merchant prince is gradually giving place to the industrial prince. The agents that have brought this about are advertising, traveling salesmen, quantity buying (the complement of mass production), financial policy, the agent and the sub-agent and the mail order system. The manufacturer has found it necessary to supplement his mass production with quantity selling. He was compelled to relieve a system of continuous factory production by means of a steady and constant absorption of the product. The increasing capital outlays for the plant made it essential that its value should not be put in jeopardy by being separated from the source of that value, i. e., the market. The manufacturer furthermore was under the pressure of the same competitive system which forced consolidation of interests in the productive field and which now persists in forcing still further the economies of combination by demanding a like consolidation in the field of distribution.

All these demands are met by the manufacturer by attempts to reach the market as directly as possible. By knowing and studying the market he could gauge the production of his mill. By advertising, by established trade marks and trade connections he secured a firm hold upon his customer's good will, an asset often more valuable than his patents. In passing around the jobber, the wholesaler and other market experts, he is in a better position to ascertain the true nature of the demand for his goods. A jobber by placing a big or-

der with the factory, in one year may induce the manager to lay out large sums for the extensions and improvements; the next year the jobber may demand concessions which if not met will result in his placing that year's orders with a rival factory. Such uncertainty places industrial capital of this kind in great jeopardy. In a sense the way for this re-organization of the manufacturer's selling methods was prepared for him. The retail establishments themselves had grown to large dimensions while the organization of transportation and communication and storage made it possible to place large orders without the aid of the wholesaler. Quantity selling was met by a retail market capable of quantity buying. The benefits of this direct connection between the producer and large retailer are divided between them. The manufacturer establishes a jobber's list and where the retail dealer can buy in quantities he gets the advantage of the wholesale prices. It is natural that the jobber should make a struggle to maintain his ancient position in the market. He is putting forth efforts in two directions. In some lines the wholesaler is maintaining a favorable advantage over the retailer by forcing the manufacturer to grant him more and better discounts. This is often done by powerful associations of jobbers which dictate terms to the manufacturer. In another way the commission men are protecting themselves by buying into the manufacturing business and becoming producers themselves. This is especially noticeable in the cotton goods business.

The effect of the competitive forces was first made manifest in the establishment of agencies by the manufacturers. These, as we have noticed, were often subsidiary concerns. Although they formed a necessary function in the mechanism of direct selling yet this is

not the sole use to which such a subsidiary company may be put. The subsidiary aspect of the agency coupled with a name which did not disclose its connection with the parent company, gave the big corporation an opportunity to escape taxation by arranging that the subsidiary company which had branches in different states should have only a nominal capitalization and in case a question of monopoly should arise, the subsidiary company would act as a buffer to successful investigation on the part of the government. Again, as has been pointed out, a central selling agency enables a number of nominally independent concerns to market their goods jointly or it enables a combination of firms, which had made reputations before the consolidation to market the old brands as before without the usual fear of competition or loss of identity.

The marketing of manufactured goods, although lacking the security and economy given by the organized exchange, is showing the effects of the universal tendency in the business world, the elimination of unnecessary factors and the greater economizing of efforts and costs through better organization.

CHAPTER VI

ORGANIZATION OF EXPORT BUSINESS

49. *Necessity for seeking foreign markets.*—Business problems in the United States have usually been limited to those connected with home trade. But with the rapid growth of our manufacturing surplus American business men are becoming interested in foreign markets. Most American manufacturers know very little of this kind of trade and much provincialism is displayed by those who attempt to enter a distant foreign market for the first time. On the other hand, some of our exporting houses have built up organizations that compare favorably with those of England or other commercial countries of Europe. Such enterprise and organization as are displayed by the American companies handling sewing machines, typewriters, talking machines and cash registers may well serve as examples, not only to other American exporters, but to the rest of the world also. The Eastman Kodak Company has not only invaded European markets as a selling agency, but by adroit manipulation of companies established in England, France and Germany, has made large profits from its financial arrangements.

The progress of our methods in winning the favor of foreign customers is illustrated by the agricultural machinery business. The early method of introduction of these goods was by means of a public test during some exposition or agricultural show in London, Paris, Berlin, Vienna, etc. Two of these tests will serve as

examples of all the earlier methods. At one competition near Paris in 1879 three reapers were set to work in fields of equal size. The French reaper led off and finished in seventy-two minutes. The English reaper followed and finished in sixty-six minutes. Then came the American machine which completed its stretch of grain in one-third the time of the English reaper. Another of these tournaments, which did much to advertise the United States, took place in England in 1880. The American reaper sent over by the McCormick Company met with mishaps at sea that injured its appearance and left it rusty and unfit for work. Cyrus H. McCormick, Jr., who had it in charge, determined to turn its forlorn aspect into an asset. Instead of improving the machine's appearance, all the paint was scraped off and the smallest and scrubbiest pair of horses procurable were attached. However, the experts did not fail to oil and adjust in a proper way all the running gear. "The next day" as Mr. Casson relates the story, "five or six foreign reapers were on hand, each glittering with newness and drawn by a stately team of big Norman horses. The shabby American reaper arrived at last and met a shout of ridicule as it rolled into its place. But in the race 'Old Rusty' as the spectators called it, swept ahead of the others as though it were an enchanted chariot, winning the gold medal and an enviable prestige among British farmers."

50. *Modern methods of reaching foreign markets.*—To-day all this is changed and the American manufacturer of farm machinery disdains to consider expositions and trials, and if any attention is given to them it is by agreement among the various firms, and any action determined upon is decided by a flip of the coin. The American binder and reaper dominates the foreign

market. The shipment of these goods is now in cargo lots and the manufacturers have organized the agricultural districts of Europe along the same effective lines that obtain in the United States. Their general agent and their sub-agents, their block men and their mechanical experts, are to be found eagerly and intelligently pushing for new business, to develop the old, and to handle both with tact and with satisfaction.

How recent is the entrance into the foreign trade by some of our largest corporations, is brought to mind by the constant newspaper reports of the "trade agreements" regarding steel imports and exports between the United States Steel Corporation and some European iron and steel company. It is only within the last five years that the greatest iron and steel concern in the world has taken an active interest in the foreign market that would in any way compare with the farm machinery companies.

The experiences of such well-known firms as those mentioned and others, such as the large meat-packing companies, certain steam pump, steam-heating and electrical machine manufacturers, are not the only experiences of American attempts to establish an export business. But few American manufacturers have formed a correct estimate of the difficulties to be overcome in invading a foreign market. It should first be realized that Europe's share in international trade is and always has been immensely greater than the share of the United States. It is for American merchants to fight for a position already in the hands of competitors, and—which is no less important—to meet in the open field new and fast developing commercial nations. Russian shops recently secured one-half of the contracts awarded by the Italian government for freight and passenger cars, and

this, too, in competition with the home and German bidders. Spain is selling in the Indian market, cotton undershirts made of American cotton, while Japan stands ready to monopolize the eastern markets the moment the commercial spirit makes itself manifest in China and Eastern Asia generally.

51. *Direct relations with foreign buyers.*—It is the opinion of successful export houses that it is not difficult to obtain sample or trial orders from foreign countries. The real difficulty is in holding the relations once established. The method by which a manufacturer should approach the subject of exporting is outlined by Mr. B. Olney Hough, editor of the *American Exporter*, as follows:

(1) Secure a "paper acquaintance" with foreign countries, capitals, seaports and commercial centers as a foundation for a broad and thorough cultivation of export markets. These may be secured from a good atlas, map and a gazetteer, and incidentally with the aid of geographies, guide books, books of travel, and even steamship folders. By such study certain physical limitations will be suggested, but the manufacturer should always be open to conviction. The invasion of Europe by American-made boots and shoes is an illustration of a successful venture which was undertaken in the face of very discouraging competitive conditions. Last year the exports of this line of goods amounted to over three million dollars.

(2) Advice should be sought from other manufacturers in the same line of business and from professional exporters. These men have had practical experience in many lines and in many countries. They have met the foreigner both at home and abroad and can give valuable information about the chief markets of the world.

(3) Having acquired a knowledge of the world's markets and of what other manufacturers are doing in exporting their simi-

lar goods, the next problem is: In what markets will his goods have the best opportunity? He may gain this information in three ways: (a) by sending a traveling salesman, (b) by advertising, (c) by direct correspondence with possible foreign customers.

(4) Names of merchants and importers in different cities may be obtained from a variety of sources. For example:

(a) Directories are available—city, country and world directories. No foreign country has carried directory-making to such perfection as the United States, and in foreign classified trade lists many important merchants are likely to be omitted. They may appear, however, in the book under another caption.

(b) Lists of dealers in a particular line of business may be purchased from firms who make the compiling of such lists a business, but lists of addresses more than a year or two old should be discarded.

(c) Men who have traveled or lived in foreign markets can often supply information about leading merchants and local trade papers. The publishers of these sheets are often willing to supply names of local dealers.

(d) "Rating books" are seldom found outside of the United States. Only one English publication seems to enjoy the general confidence of exporters. This book is sold only to bankers and is limited in its scope.

(e) New York foreign bankers can supply valuable credit information and this is freely given after proper introduction.

(f) The various commercial agencies in the United States, although their charges are high, are able to give information leading to knowledge of a firm's financial position.

(g) The local "information bureaux" at the homes of the foreign correspondents can often direct attention to the comparative importance of certain foreign merchants.

(h) Most of the larger importers in all of the world's principal markets have certain American connections established from whom references are quickly obtained.

(i) The American consuls in foreign lands, although they

are neither drummers for American goods nor reporting agencies, may nevertheless be in a position to advise a manufacturer in the introduction of his goods.

(j) In a restricted sense the Bureau of American Republics is an institution for supplying trade information about different American countries.

(k) The United States Department of Commerce, through its consular and other reports, gives timely items concerning foreign countries the world over.

In considering the above sources of information it is well to bear in mind their limitations and the fact that only after long study can information so gained be utilized. One feature found in some parts of the world, especially in the Far East, most parts of Central and South America, and very frequently in Australia and in South Africa, is that the greater part of the import business is handled by general importers. They are spoken of in the trade as "merchant" or "indent" houses.¹ In the parts of the world we have just spoken of, the smaller dealers do very little importing on their own account, but fill their orders through the general importers. This is an important fact to be borne in mind. The manufacturer attempting to make business connections in China or Central America would not make progress by obtaining lists of names of the actual dealers in his line of merchandise. The men to seek are the general importers who are likely to be interested in his goods.

52. *The importance of clearness in foreign correspondence.*—The first essential in foreign correspond-

¹ A "Merchant house" is a concern that buys goods in quantity on its own initiative and then seeks to dispose of them to the trade. An "Indent house" takes orders for certain goods from dealers on sample or otherwise, then imports for the benefit of its customers.—B. O. Hough, "Elementary Lessons in Exporting," page 6.

ence is simplicity of style. The goods should be described and explained in a way that will be understood by a person completely ignorant of them. For example, a manufacturer of children's stockings quotes a certain grade and size at \$1.05 per dozen, with a "rise and fall of 5 cents" for every half size larger or smaller. Outside the United States only a few dealers would understand this. Prices are seldom quoted by European manufacturers. The metric sizes rather than the English are customary in most European markets. All names of goods and names of parts should be examined before using the terms in a letter, since it may be the case that the American name is purely a local one and not generally understood. This applies to catalogues especially. Clearness and simplicity from the foreigner's point of view is to be aimed at. Help may be had in doing this by a study of the literature sent out by foreign manufacturers along the same lines. Mr. Hough estimates that probably 50 per cent of our machinery catalogues, and even more than that of our special lines, are almost incomprehensible to any readers outside the special trade to which they apply. He cites the following instance: A trained mechanical engineer, holding a diploma from one of our first American technical schools, together with a thoroughly competent American agricultural engineer, jointly studied for two days over the directions for setting up an American hay-press six thousand miles from the factory, and finally gave up the problem in disgust. On appeal to the manufacturers, a sarcastic letter was received, which gave no advice at all, necessitated another letter and a further delay of six weeks before the machine could be made to work.

Another caution to be observed is in connection with

the introduction by catalogue of new goods. If catalogues are written from the American point of view, they will be as so much "Greek" to foreign readers. The export of cement block machines is an example. The catalogue goes into great technical detail and reads as if the author thought that the conditions in all countries were identical with our own. As a consequence, a large percentage of this foreign correspondence is without effect.

The importance of attaching a distinctive mark of quality should not be overlooked in foreign trade. These customers show far more respect for names and marks than Americans. A trade-mark once established needs little pushing thereafter. For a similar reason a personal letter to a foreigner is always more effective than a circular letter. Then, too, the best results are obtained when letters or catalogues are written in the language which the recipient uses. Imitation typewritten letters with names and addresses inserted are so perfect nowadays that it is difficult to distinguish them as "process" letters. These form letters can be put into several languages at a small charge. In the case of catalogues it is well for the American exporter to use at least one other language than the English, preferably the Spanish. Furthermore, it is not necessary to have the foreign edition an exact duplicate of the domestic edition. It can be shortened by leaving out all articles that have a home demand alone. Some large firms have two distinct catalogues. One is large and complete and is meant for important and regular customers, the other is a cheap booklet for general circular use.

The manufacturer should be careful to secure a competent translator when addressing correspondents in a

foreign language. Many men make this work their specialty in the large export centers, and the cost of their services is not high. The following list indicates the country and the language to be used in correspondence with foreign houses. Spanish literature can go to South America, Cuba, Porto Rico, the Philippines, Spanish and Portugese colonies, such as the Canaries and the Azores; French literature can be used in France, Belgium, Italy, Greece, Turkey, Egypt, Algeria, Portugal and Brazil; German literature in Germany, Austria-Hungary, Switzerland, Scandinavia, Russia, Roumania and Bulgaria; and English and Spanish literature combined will cover the rest of the world.

53. *Quoting of prices.*—How prices should be quoted in the export trade is a debatable question. There is a general agreement, however, that the manufacturer should make a study of his particular line of trade in order to discover whether it is wise or not to quote prices in his catalogue. It is well to remember that the one price system in vogue in America and England is not so highly esteemed in other countries. A graduated scale of prices, therefore, may meet several contingencies that arise in the export trade. There are (1) the prices of the wholesaler and retailer; (2) the possible progression of trade from a retail to a wholesale business; (3) the forced advancement of prices; (4) the practical question of "taking care" of export commission houses, which is more easily solved if prices to the buyer are elastic.

The revision of prices is considered very bad business policy unless it is done with a great deal of care. "Nothing," says one authority, "is surer discouragement to foreign buyers than to tender orders on the

basis of manufacturer's quotations and have their orders returned to them with the statement that prices have advanced. Tying a string to a quotation in the shape of the provision that all prices are 'subject to change without notice' is very far from meeting the requirements of export business, where buyers are located sometimes four and six weeks' mail time distant."

In this connection it may be well to mention that prices quoted in dollars should include the proviso that exchange is for the account of the buyer, or that invoices will be drawn in sterling (or other foreign currency), conversion to be made "at day's rate of exchange when making shipment," and in case of shipments to Latin American countries where "dollars" are also used, quotations should specifically read "gold" or "United States currency."¹

Two other precautions to be particularly observed have to do with quotations that specify conditions of shipment, and underpaid postage. The abbreviations C. I. F. and F. O. B. refer to "cost, insurance, freight" and "free on board" respectively. The first is added to the F. O. B. ocean steamer, but it should be quoted so that C. I. F. includes the customer's nearest port.

Manufacturers in the interior of the United States would avoid much friction if they observed the difference between the terms F. O. B. New York and "Freight paid to New York." The foreign correspondent assumes that F. O. B. excludes all charges before the goods are put on board ship. The transfer charges from the railway station to the ship are often very high and the exporter should specifically state that these are to be paid for extra if he wishes the charge to be included in the foreign merchant's bill. In this case the

¹ "Elementary Lessons in Exporting," B. O. Hough, page 20.

term "Freight paid to New York" is the proper one to use and not F. O. B. New York.

It is difficult for most Americans to realize that foreign business men are peculiarly sensitive to small outlays imposed upon them, such as extra expense for mail matter delivered to them with underpaid postage. Perhaps there is no surer way of never getting an order from a foreign firm than to be careless in thus sending out letters or catalogues. Much of this is due to careless stamping by the office boy or stenographer. Some firms avoid this by writing a large letter "F" in the right hand corner of the envelope. This calls attention to its character when going through the hands of the mailing clerk.

In addressing foreigners, it should be remembered that they are more accustomed to formality in correspondence than Americans. Their practice should be respected. It may seem cumbersome to substitute the formal French and German termination of a letter, "accept, gentlemen, the assurance of our profound esteem," for the terse "yours truly," but it is business in the one case as much as in the other. The Frenchman likes formality, the American prefers brevity.

The following simple vocabularies of a few expressions used in foreign trade names will aid the exporter in filing and indexing names or in addressing foreign customers.¹

GERMAN.

Sohn (Singular)	.....Son
Söhne (Plural)	.....Sons
Bruder (Singular)	.....Brother

¹ Hough, "Elementary Lessons in Exporting," page 25.

Brüder or Gebrüder (Plural)	Brothers
Aktien Gesellschaft (abbreviated A. G.)	
.....	Joint Stock Company
Handelsgesellschaft	Trading Company

FRENCH.

Frère (Singular)	Brother
Frères Plural)	Brothers
Fils (both Singular and Plural)	Son or Sons
Société Anonyme (abbreviated Soc. Anon.)	
.....	Joint Stock Company
Compagnie (abbreviated Cie)	Company

SPANISH.

Hijo (Singular)	Son
Hijos (Plural)	Sons
Hermano (Singular) abbreviated hno.	Brother
Hermanos (Plural) abbreviated hnos.	Brothers
Sociedad Anónima (abbreviated S. A.)	
.....	Joint Stock Company
Compañia (abbreviated Cía)	Company

SWEDISH.

Son (Singular)	Son
Söner (Plural)	Sons
Bröderna	Brothers
Aktiebolaget (abbreviated Akt. or A. B.)	
.....	Joint Stock Company
Kompaniet	Company

ITALIAN.

Figlio (Singular)	Son
Figli (Plural)	Sons
Fratello (Singular)	Brother
Fratelli (Plural) abbreviated Flli	Brothers
Società Anonima (abbreviated S. A.)	
.....	Joint Stock Company
Compagnia (abbreviated C.)	Company

54. *Export commission houses.*—The prime economic function of the commission man is to put goods where they are most wanted at the most suitable times. The changing organization of the other parts of the industrial system outside the field of exchange has varied the duties of the commission man from time to time. He has generally usurped those parts of the distributive system which the producer or consumer deemed too far beyond their own time and energy to be considered. Standing thus between the producer and consumer, the commission man's business partakes of the nature of an agency. He sells for one and buys for the other. If his interests are chiefly centered in finding a market for the manufacturer, he is called a manufacturer's agent; if his interests are devoted to the finding of goods for a consumer or another firm in a foreign country, he is termed an export commission man. The importance of the commission house depends largely upon the duties which it performs as an intermediary. As has been mentioned above, both the producer and consumer are continually encroaching upon these functions as they find it more economical to do so. To-day, however, the export commission house may be defined as a buying agent in America for foreign merchants. It combines

with this function the business of shipping the goods and of financing such orders—that is, paying the manufacturer out of its own resources and in turn collecting from the foreign merchant. These export houses seldom buy any goods until they have received orders for the goods from their foreign customers. With the development of the export business there is a tendency for these houses to extend their functions by going into the foreign field for the purpose of inducing merchants to buy through them. In such cases the export house either sends its own traveling salesman or establishes its own branch offices in foreign markets, often opening up a sample or sales room. In other directions the functions of the commission house have been modified. Some manufacturers avoid the export commission agent by sending their own representatives abroad; others operate through agencies which take a limited number of manufacturers usually in the same line of trade. These agents act for their principals upon a salary or a commission basis, or the two combined.

The greatest encroachment upon the functions of the commission house, however, has been from the direction of the big foreign concerns which take large quantities of American goods. Branch offices are maintained in New York and other market centers, and through them all orders for American goods are executed. This movement toward personal representation has been very marked of recent years and illustrates very clearly the tendency manifest in all departments of industry, to combine as many activities as possible consistent with economy and efficiency under a central control.

In treating of the export commission house as generally accepted by the trade and as defined above, it is well to distinguish between those who confine their opera-

tions to certain parts of the world and those who do not so limit their operations. Each of these classes contain some houses which do a special line of business and others which receive orders for any sort of American goods, from any foreign house of assured standing.

We have spoken from the American point of view and have generally referred to New York City as the type of a market center; but it should not be supposed that export commission houses are not found in other countries. In fact, London is the real home of the world's commission houses. Here are found five times as many as in New York City. All the big continental market cities, such as Hamburg, Rotterdam, Antwerp, are each as well supplied as is New York City, which has about six hundred export commission houses.

There is little in the *modus operandi* of the export commission house that is difficult to understand. They do business only with foreign houses whom they know, and, as a rule, ship goods subject to draft attached to documents or against confirmed credits. In some cases where the export house is also an import house, the exchange of commodities permits the commission firm to arrange the financial settlement in a different manner.

The advantages and disadvantages, both to buyer and seller, offered by this method of distributing goods may be briefly stated. The advantages to the foreign customer in dealing through a commission house may be summed up as follows: (1) He can forward all orders under one cover instead of dealing with a large number of separate manufacturing concerns; (2) he receives his shipments on one bill of lading; (3) his payments are to one person and not to many; (4) a foreign firm may get longer credit extensions from a commission house, that is, the exporter being acquainted with

the trade and having a wider connection among foreign banks, would not hesitate to grant longer term drafts.

The advantages to be derived by a manufacturer may be similarly summarized: (1) The export house carries out the shipping details; (2) the export firm is a home concern which can be easily investigated if its financial strength or commercial standing is at all in question; (3) collections can be enforced according to American laws; (4) the commission firm is in a position to secure better ocean freight rates, or in any event to avoid the excessive charges incident to small shipments by individual manufacturers.

55. *Cautions to be observed in dealing with commission houses.*—Certain cautions in dealing with commission houses should be observed, for there are not only untrustworthy firms, but the character of foreign trade itself breeds sharp practices and offers many pitfalls to the ignorant and the unwary.

It should be recalled here that a commission house does not originate orders and offers only a few facilities for introducing a new firm's goods into foreign lands, also that these export firms handle a great variety of goods, in fact everything for which a profitable market may be found. The representatives of the commission house must of necessity scatter their efforts and can not know the "ins and outs" of every business. Among those export houses that have foreign branches in many markets there will be found great differences in ability to handle special lines of goods. For example, a large export house has its own branches in Shanghai, Buenos Ayres and Sydney. The Shanghai house deals in staples like cotton piece goods and wire nails; the house in Buenos Ayres devotes itself entirely to engineering lines of goods for constructional work, while the Sydney

branch handles miscellaneous lines, such as hardware, boots and shoes. While this concern would not refuse to handle the goods of a boot and shoe manufacturer through its Buenos Ayres establishment, a manufacturer could undoubtedly find a rival commission house whose standing and influence in the same market would be much greater in the boot and shoe business. A manufacturer should satisfy himself first as to the business which a commission house is doing in a certain market; and, second, what the possibilities are of introducing his wares satisfactorily. It is not enough to know that the New York house has a big reputation; this may have been gained in lines of no interest to the manufacturer in question.

Furthermore, in this connection an export house that solicits the "exclusive agency" of a manufacturer should be judged by the facilities it has in different markets for handling this particular ware, and not by its claims to a world-wide influence and connections. Many houses will solicit an exclusive agency for the whole world. No wise manufacturer will expect to get satisfactory returns if he grants it. No commission house can do justice to a line of goods covering so broad a field. Not only should a manufacturer be on his guard against extravagant propositions, but also for downright misrepresentations of marketing facilities. Letter heads are cheap, and vague representations suggest great possibilities, but by never giving definite references, or locations of their "numerous branches scattered over the world," they are easily composed. Every such solicitation and representation or claim should be thoroughly investigated by the manufacturer.

56. *Evil of substitution.*—Perhaps the oldest evil connected with the export commission business is the prac-

tice of substitution. The commission house receives an order from a foreign firm. Instructions are enclosed showing from what American manufacturer the goods are to be procured. Instead of filling the order with the goods, the commission house selects another manufacturer of similar goods and ships a substitute. This is done because the commission house can probably get special terms from the manufacturer. The cure for this practice rests with the principals in the transaction. If a foreign house should send duplicate orders to the manufacturer at the same time it orders through the export firm, a sufficient check would be imposed against this abuse. Manufacturers should urge all foreign customers to do this.

57. *Bonus*.—Competition among commission houses has given rise to another abuse. Business for foreign clients is done on a $2\frac{1}{2}$ per cent commission basis. Commission men claim that this is too small. They therefore supplement the buyer's commission by a "bonus" from the selling manufacturer. This division of the expense between buyer and seller would assume a different ethical aspect if it were surrounded by different conditions. The commission house solicits private discounts and commissions from the manufacturer. This the export house appropriates to itself. Sometimes the case is reversed and the manufacturer offers special discounts in return for the export firm's good will. These facts in themselves are not unjustifiable, but they have another appearance when taken in connection with the claims of the export commission house that all discounts, cash, selling and every other form of rebate shall go to the benefit of the foreign customer upon the payment of the stated $2\frac{1}{2}$ per cent, or less, commission.

58. *Foreign sales arrangements*.—The export com-

mission house is really the agent for the foreign buyer in America. The American manufacturer seldom trusts his goods to agents located in foreign markets. He does, however, work through the export commission house. This is done directly as has been already described, and indirectly by maintaining his own agent, the manufacturer's agent, who keeps in touch with the export commission house with hopes of receiving their orders. Manufacturers located in the interior are using this means more and more. Some firms more enterprising than the others are extending their activities into the foreign market. Four methods are used in putting their goods upon the market: (1) through local merchants or "jobbing" houses; (2) through foreign resident commission agents; (3) by means of salesmen sent out by American manufacturers; (4) through their own branch houses established in foreign markets.

59. "*Jobbing*" houses.—The first method has the advantage of securing a representative who is interested in the manufacturer's wares because he has a personal interest in the profits. The manufacturer should weigh against this the practices that have grown up around this form, especially where the merchant or "jobber" has been given exclusive control over any considerable territory. Self interest has often induced the merchant to take a competitive manufacturer's goods and push them where a more favorable price could be obtained. Often, where the American wares have attracted trade by their novelty, the merchant has had a similar article made by some home manufacturer at a cheaper price and has gradually substituted the latter for the former. Having an exclusive control over the American article he can easily maintain the appearance of selling it by send-

ing in a few orders now and then, for the sake of keeping American competition out of the field.

60. *Foreign commission agents.*—The second method is not a favorite one with Americans. They hesitate to intrust their interests to unknown agents. As a very unsatisfactory class of agents has developed in this field, manufacturers should examine the references of such agents with care. In nearly every country except the United States an order is a contract, and the agent according to the laws is also authorized to collect moneys. A manufacturer may provide that orders tendered by agents be accompanied by bankers' references. This will show the financial position of the customer and help the manufacturer in forming a judgment of his credit reliability; or he may demand that a draft be attached to documents. Many houses use commission agents to develop trade among the minor tradesmen. By having a reliable agent on the ground many small individual orders can be shipped and financed together. The manufacturer in such cases draws directly upon the agent who attends to collections and the delivering of the goods. Such drafts are generally dated so as to give the agent time to make his collections before meeting payment on the manufacturer's draft.

61. *American salesmen abroad.*—The third mode of establishing a manufacturer's goods in a foreign market embodies the personal representation principle. The salesman should therefore be selected with much care. His personality will be a strong factor in making desirable and permanent trade connections. The American "drummer" type seldom succeeds. A competent judge in this matter estimates that fully 80 per cent of American salesmen who visit foreign countries to introduce American goods return home complete and dismal

failures, no matter how satisfactory a record they may have established in our own country.

Personal representation in the foreign field is so important, however, that many manufacturers make frequent trips themselves. Many foreign markets lie at the manufacturer's door, as Canada and Mexico, but it costs but little to visit the principal European markets. Four hundred dollars will cover the expense of a four weeks' trip abroad.

62. *Branch houses.*—In the larger markets where it is necessary to keep up an established business as well as to develop a new trade, the fourth method is considered a very desirable one, even if it is confined to an establishment's sales agency. This method permits foreign customers to fill orders without delay or the formalities connected with long distance ordering, and to order in small quantities. The branch house also impresses the customer with a feeling of security in the responsibility of the distant firm. Mistakes and disputes are easily adjusted and redress effected without the delay which a long tedious correspondence entails.

A modification of the above method is frequently adopted by firms whose foreign trade does not warrant the expense of maintaining a branch house alone. Therefore several non-competing houses unite and put their trade into the hands of a "combination" salesman. This method is particularly popular in England and Germany. When these agents keep stocks of goods and collect money, the firms represented in the "combination" frequently require bonds of the salesman.

A still further adaptation of the branch house method is to establish one main office in a centrally located market and put it in charge of all the other sub-branches. London is naturally the great center for these houses

since it is in more direct touch with the different parts of the world than any other city. Of course the more indirect the connection between the consumer and the manufacturer, the greater the expense and the greater too is the opportunity offered for mal-practice which is detrimental to both the manufacturer and the consumer. How the line of dependence is organized may be seen in the following examples. Importers in Switzerland order through an agent in Germany who has charge of the continental business; he in turn orders through the London branch which has general charge of the European trade. The London agent finally places the order in the hands of the American manufacturer.

How some of the prominent American manufacturers work through their European branch houses is described by Mr. Hough thus:

A large American manufacturer of steam-heating apparatus puts his general European business under control of his British branch. This branch, however, quotes prices in two different ways. Carrying a stock of goods in England it quotes for prompt shipment from England to European points, prices 10 per cent in excess of similar prices quoted for shipment direct from the factory, which latter prices are invariably the same as would be quoted by the factory itself. Ten per cent advance demanded for shipment from English stock is thought to be justified by the expenses incurred in carrying stocks, and proves acceptable to many European buyers, especially when very prompt delivery is required. A large American manufacturer of steam pumps has agencies established in all the principal European capitals. Stock is carried at each agency subject to the general control of the main branch in London. Once a month a stock list is published of all goods on hand in each one of the different agencies. This list is put promptly into the hands of each agent so that each one is not only posted as to goods in his own

stock, but as to pumps of other sizes or descriptions which are available at other agencies, and in case a special pump, not in the agent's own stock, is required at once, a telegram can be dispatched to the nearest brother agency, where the pump of the desired description is available and the apparatus received in the shortest time possible.

CHAPTER VII

CONSULAR SERVICE

63. *Purpose of the consul.*—Among the public trade-promoting institutions we may include the consular service. A consul is really an agent for the promotion of commercial intercourse between the country he represents and the one in which he lives as consul. Consular service is largely a business organization and should therefore be managed as a business department. Until recently the American people have been so busy with the development of the vast home resources that they have had little occasion to be interested in the representation of their interests abroad. But the growth of foreign commerce has given rise to a demand for a better consular service. The United States is to-day an exporter as well as an importer, and this fact has stimulated all forms of business activity.

The consul is not necessarily a diplomatic officer, who is concerned mainly with political relations. The consul is a commercial agent acting in an official capacity. Sometimes, however, the duties of the two overlap. The consul may help greatly in administering the tariff law, particularly in certifying consular invoices and sending out reports on commercial subjects. In 1856 annual reports were for the first time sent out, and in 1881 was begun the issue of monthly reports which have been supplemented since 1897 by daily commercial reports.

64. *Brief history of the American consular service.*—

The American consular service was created primarily to protect the lives and property of United States citizens abroad. This grew out of a still more primary desire to protect American shipping. The first consul was appointed in 1780, but no laws regarding this office were passed until 1792. In this year (1792) consuls and vice consuls were appointed, while in 1801 consular agents appeared, and in 1856 consular clerks. In 1854 the title of consul-general was used for the first time and since then the number of offices has increased steadily. Until very recently little attention was given to the fitness of appointees to the service. Politicians, unsuccessful business men, or persons who wanted to give their children a foreign education, were often given consulates. But now that Germany is competing so keenly with America in foreign trade, and succeeding because of her remarkably able consular service, the United States has realized that she must improve her consular service so as to reap the consequent benefits of a more wide-spread prosperity for her own people.

65. *Present system governing consular appointments.*
—In 1906 a new system was inaugurated for the purpose of procuring more efficient consular officers. A board of examiners consisting of the third assistant secretary of state, the chief clerk of the department of state, and the chief examiner of the civil service commission hold examinations for admission to the consular service. This is open only to applicants between the ages of twenty-one and fifty, who are American citizens of good habits, and who are qualified physically and mentally for this work. They must have been designated by the President of the United States for appointment subject to examination. The examinations are also for student interpreters who are to be stationed in the

Orient, for the purpose of studying Chinese and Japanese to aid the consulate in interpreting these languages. Interpreters must be unmarried, and between the ages of 19 and 26. They are to remain in service for ten years.

The examination is written and oral, and an average of 80 per cent must be obtained in both. The subjects for the written examinations are: one modern foreign language; the natural, industrial and commercial resources of the United States in reference to foreign trade; political economy; elements of international, commercial and maritime law; American history, government and institutions; political and commercial geography; arithmetic; European history and the history of the Far East since 1850. The oral examination is for the purpose of determining the character, alertness, and general information of the applicant; his natural fitness for the service, his command of English and his general education.

Those who pass a creditable examination are appointed to the eighth or ninth grade of consuls, or they may become vice or deputy consuls, clerks or student interpreters. Those serving in the department of state with annual salaries of \$2,000 or more may be promoted to any grade of the consular service above the eighth grade. Vacancies in offices above the ninth grade are filled by advancements from lower grades. Political views are to play no part whatever in appointments and promotions. The test is to be efficiency. It will be seen that the examination is not competitive, and only those well qualified are likely to be appointed. Successful candidates are placed upon the eligible list for two years. There is also a system of inspection which gives the government detailed reports of every United States

consular officer. Besides, there is an efficiency record which determines advancement.

66. *Grades and salaries in the consular service.*—There are seven classes of consuls-general and nine classes of consuls. The distinction between the two ranks is not sharply defined. The salaries of some consuls are greater than those of some consuls-general. The consul-general is placed at the head of a consular district and he has supervisory authority over other consular posts. This office is known as a consulate-general, and to it belong a vice and a deputy consul-general and one or more consular clerks. Then there are consular agents who report to their superior officers but make no direct reports to the government.

The salaries of the 310 consuls and consuls-general range from \$2,000 to \$12,000 each. No consul is allowed to engage in private business, nor is he to practice law. He must, however, perform service as a notary. All fees are to be paid into the treasury, his salary being his only compensation. The following list of divisions and salaries is according to the present law:

CONSULS-GENERAL.

Class	I.	(2 in all)	.....\$12,000
Class	II.	(6 in all)	..... 8,000
Class	III.	(8 in all)	..... 6,000
Class	IV.	(11 in all)	..... 5,500
Class	V.	(18 in all)	..... 4,500
Class	VI.	(9 in all)	..... 3,500
Class	VII.	(3 in all)	..... 3,000

Total, 57

CONSULS.

Class	I.	(1 only)	..... \$8,000
Class	II.	(1 only)	..... 6,000
Class	III.	(8 in all)	..... 5,000
Class	IV.	(12 in all)	..... 4,500

Class V.	(21 in all)	4,000
Class VI.	(32 in all)	3,500
Class VII.	(47 in all)	3,000
Class VIII.	(61 in all)	2,500
Class IX.	(70 in all)	2,000

Total, 253

67. *Consular reports*.—About a half century ago, following the example of France and England, consular officers were encouraged to make commercial reports. It was found that a good way to promote foreign trade was to collect material abroad of a commercial character in the interest of navigation, commerce, agriculture and manufacturing. The monthly consular reports are sent to educational institutions, libraries, and the general public, while the daily reports are sent mainly to newspapers, commercial bodies and exporting and manufacturing firms. Since 1890 a series called "Special Consular Reports" has been published. These are collections of articles on special subjects prepared in the form of printed circulars for consular officers. Some of the titles are: "Cotton Textiles in Foreign Countries," "Malt and Beer in Spanish America," "Insurance in Foreign Countries," and "Streets and Highways." Some of these articles have been distributed widely in the United States, where they are occasionally in great demand. In the *Daily Consular and Trade Reports* we find a greater definiteness and exactness in detail. These concern foreign customs regulations and tariffs; local demands in various markets; local styles and habits; reports on crops; reports on foreign business methods in respect to credits, means of sale and packing; and foreign food and patent laws. Following are some of the considerations discussed in the daily and monthly reports: Tobacco in

France, The Mining Industry in Africa, American Trade in Mexico, The Sugar Industry in Cuba, Flour Milling in Italy, Seeking Trade in Canada, Musical Instruments in China, Reaping Machinery for India, Olive Crop Reports, and so on. In the article on "Seeking Trade in Canada," the following subheads are briefly treated of: "How to increase American trade in the Dominion," "Mail Orders and Advertising," "British and German Trade Efforts," and "Prices of Farm Machines." In an article on "American Trade in Switzerland," the cause of the small number of sales in the Republic is discussed, as well as what the commercial traveler sells in Switzerland. In another article called "Burma as a Trade Field," these subheads appear: "Opportunities for Increased Sales of American Products," "Imports and by Whom Controlled," "American Sales Methods at Fault," and "Methods for Increasing American Trade."

A knowledge of foreign customs regulations and tariffs is of great importance to the importer and exporter. Recently the consular reports have referred frequently to any new requirements. Besides helping out in any formal difficulties that may arise, such as failure to pack things separately and specifying exactly what is in the packages, the changes in tariff schedules enable the exporter to figure out more exactly his margin of profit. For instance, the following bit of information found in one of the later monthly reports would be of very practical interest to an exporter of sterling and plated silver and gold ware to France:

Sterling silver is difficult to import from the United States on account of the government control, as each piece of silverware must be stamped by the government officers, and a tax per

weight is paid for control. Silverware that has not the stamp of the government control cannot be sold, and none is permitted entry from abroad unless it passes through the *controle* and pays the stamp tax. The same may be said of all articles of gold.

Then follow extracts from statutes in detail, giving the exact taxes and requirements for the sale of this class of articles.

The necessity of international protection of patents is often emphasized in the reports. Often an American article has been imitated by other nations and sold, which practice has interfered greatly with the American trade, as in the case of the sewing machine in Brazil, where it was sold by German manufacturers. Valuable service, too, has been rendered by the consuls in protecting American trade marks and patents when registered abroad.

Nearly every issue of the reports has some reference to the regulations concerning the preparation of foods for foreign markets. Many of the laws restrict the importation of American fruits and meats. Some of the rules are only formal ones for the purpose of protecting the local trade, while others are in reality intended to protect the public health. In Germany there is a law which prohibits the importing of fruit dried on zinc frames which is probably simply a measure to restrict the American competition. In Canada no patent medicine is allowed to be sold if it contains cocaine, or alcohol in excess of the amount required as a solvent or preservative, or if it contains any drug, of a long list submitted in the consular report, which is not printed conspicuously on the label and wrapper of the bottle. This latter measure is probably really intended for the public health.

68. *Foreign needs and prejudices.*—One decidedly important feature of the consular reports is the very frequent reference to the demands of the local markets. Upon the accuracy of this information depends much of the success or failure of the American export business. Until recently the exports from the United States to Hong Kong were almost exclusively flour and kerosene. But now that the local demands and the methods of carrying on business in the East are better understood, there has been a considerable expansion of trade with these countries. Exporters are taking up every suggestion much more seriously than before. Some years ago, an exporter of tinned goods found that a good part of his shipment had been rejected apparently without any reason. Upon investigation, it was found that the rule in China was to open every case, remove the wrappers and examine every tin. If a label was in the least blemished the tin was rejected. The exporter must either comply with these rules or lose his trade, for the Chinese guild listens to no argument and is decidedly autocratic in carrying out its rules. This instance shows the importance of having full and correct information on such matters.

Americans have often been criticized for not paying sufficient attention to local styles and prejudices in the export trade, and for that reason have sometimes been left far behind while Germany and England have succeeded admirably in introducing certain articles of export especially in many of the backward countries where local preference is often groundless. It is not that these people are prejudiced against American-made goods; it is simply that they do not know of them or that the goods are not exactly what they want. The Germans send reliable and capable salesmen who speak the lan-

guage and understand the customs of the particular country to which they are sent, and these generally succeed in introducing some line of goods which conforms to the native ideas. Report after report emphasizes the importance of sending a good salesman who speaks the language and who does not expect to succeed without a strong effort. Too many houses expect to succeed in introducing a new article by simply sending out catalogues and price lists.

To illustrate the conservatism of various countries we may cite a few instances from the consular reports of various years. It would do no good to attempt at present to introduce mutton, or butter or cheese into Japan, as the Japanese have no taste for these things, while cotton seed oil would probably find a good market as well as condensed milk. The Chinese and Japanese want distinctive native patterns in cottons, and the English in conforming to their taste by actually copying designs of old Japanese art upon their fabrics have succeeded admirably in this line of export trade. The Samoans want gaudy patterns in cotton goods; in Hayti mauve is popular; in West Africa the men wear flowing white gowns and the women gay calicoes and velvets. In Cuba there is a good market for cheap white canvas shoes and low cut tan or russet high heeled shoes in rather small sizes, as the Cuban has a small foot. In Asia Minor the people are gradually disposing of their ancient costumes and there is now a market in Smyrna for American ready made clothing, especially the cheaper grades of men's suits. The Dominicans prefer a good grade of dressy soft or vici leather shoes; the women especially like low fancy strap slippers and sandals with beaded ornamentation. There is no market in France for American silver plated ware unless the de-

signs are of a type familiar to the French purchaser, who desires classical styles, such as Louis XV and XVI, Empire, and so on. In Germany it would do no good to try to sell American silver plated spoons and forks, as the Germans favor a different style—narrower, longer and more pointed bowls in the spoons, and longer and more slender prongs in forks.

The consular reports sometimes mention shortage of crops in foreign countries. Occasionally there are opportunities for starting an export trade on this account. When the shipping is once started it is apt to go on indefinitely. After the apple shortage in Tasmania not long ago, large supplies of American cold-stored apples were sold in Europe and Australia.

69. *Foreign credits*.—Another thing of importance to the exporter is a knowledge of foreign business methods. Consuls have furnished valuable information as to local practices of granting credits as well as to methods of collecting debts. This is a typical paragraph found often in the consular reports: "A manufacturer who demands cash in full at the port of shipment should not expect much business in ———. The European competitor gives credit and thus gets most of the business. Of course he studies his customers through his traveling salesman and knows whom to trust and takes but few chances." Compliance with this custom is essential in all trade with South America.

70. *Methods of packing*.—There is a very general complaint abroad in regard to the method of packing by American firms who have as a rule shown contempt for this. The consul can be of invaluable aid in giving instructions to the merchant starting on foreign trade. If the merchant disregards these instructions, he has only himself to blame. American trade is often lost in

the Orient for this reason. To illustrate: An American firm was selling a bottled relish in the Philippines and sent it so badly packed that it often arrived in damaged condition. When the local firms wrote to the American house explaining that better packing would remedy the condition for further orders, the house replied curtly, saying that its men knew how to pack goods. Later shipments arrived in as badly damaged condition and as a consequence orders were transferred to a foreign house which guaranteed the condition of shipments.

It stands to reason that meats for hot climates must be very especially packed, furniture must be sent knocked down to avoid excessive freight charges, leather should be shipped in strong thick boxes, with zinc linings, bound with iron bands to keep out the dampness of a long sea voyage, and flour in barrels should have plenty of hoops to keep out moisture and allow rolling. Freight is very roughly handled on the Chilean coast, and in the trade with Chile poor packing on the part of many American exporters has been and still is a great handicap to the advance of American trade in these regions.

The consular reports are full of instructions in regard to methods of selling in foreign countries. Often catalogues and circulars are sent out by American firms in a language which the local merchant does not understand. It has been repeatedly pointed out that catalogues even in the local language cannot take the place of branch houses and traveling agents who speak the language and understand the customs of the country. Some consulates have a complete directory of local business houses and will file all catalogues and price lists received from the American houses, especially when in

the native languages. They even encourage exhibitions of samples of American manufacture, but exporters have not generally availed themselves of these offers.

71. *Foreign trade opportunities.*—Of late the United States government has followed the German method of discriminating in favor of its own citizens by giving them various classes of trade intelligence. In the *Daily Consular and Trade Reports* there is a department entitled "Foreign Trade Opportunities." Here notice is given of inquiries on file at the Bureau of Manufactures. Each inquiry has a file number to which applicants refer. Some of them give names and addresses, but many are entirely confidential in the interest of promoting the American export trade exclusively. Among the things asked for are the following: mining machinery; celluloid for the manufacture of combs; dry goods agencies; cedar boards and machines for making pencils; railway ties; machinery for making sickles, scythes, straw cutters, and wood work; supplies for constructing electric tramway lines; American coal; household and kitchen novelties; chewing gum; telegraph and telephone supplies; American mirrors, and steel rails. It will be seen that there is a great variety in the articles called for. It will be well to quote a few of these trade opportunities as found listed in the reports:

No. 3246. AMERICAN MACHINERY AND FURNITURE.—A report has been received from an American consul in Latin America in which he states that a business man in the city in which he is located desires to place orders for the following articles: Dental and surgical instruments, butter-making machinery, incubators, office furniture, and bread-making machinery. American manufacturers interested in these lines are

invited to mail to him at once catalogues illustrating their articles, as well as price lists and terms of payment.

No. 3291. COTTON-SEED OIL.—A report has been received from an American consular office in a city of southern Europe in which he states that advices have been received at his office from a local business man who desires to be placed in communication with American exporters of cotton-seed oil with a view to importing the same.

72. Protection of customs revenues.—There is another way in which the consuls help foreign trade. This is the protection of the customs revenue which, of course, deals only with the import trade. All goods intended to be imported into the United States must be accompanied by invoices sworn to and certified by the consul at the shipping port. The object is to help verify the correctness of the invoice and to prevent frauds upon the revenue. The system of ad valorem duties invites the undervaluation of imported goods. This gives an advantage to the foreign merchant. By means of consular effort to prevent this practice, dishonesty has been greatly checked.

If the American consular service is to become as efficient as it should, it must have a decidedly commercial trend, and display the qualities of good business management. An ideal consulate should not confine itself merely to attending to business, but should attempt to *create* new business. This it cannot do unless the important manufacturing and mercantile houses are willing to avail themselves of the consular services in spreading their trade in foreign countries.

CHAPTER VIII

ORGANIZATION IN MANUFACTURING INDUSTRIES

73. *Specialization and coöperation.*—In the previous chapters we have attempted to bring out the important lines of development in the industrial world which have influenced the organization of modern business. If we were to examine the business of transportation or of agriculture, the same tendencies toward mass production, i. e., transportation in bulk, and farming on a large scale, would be discovered. The machine has been as potent an influence here as in other fields. Combination of technical departments, consolidation of financial interests, coöperation among the working forces have been the means whereby the possibilities due to the separation of processes, to individual initiative, and to division of labor have been made to materialize. Specialized machinery, specialized management and specialized labor have made possible the present scale of production, but friction and retarded efficiency would have made these possibilities futile if coöperation had not been introduced. The establishment of an equilibrium between these two tendencies of specialization and coöperation is the problem of modern business organization.

Not only must there be a continual shifting, in order to maintain a balance of the great divisions of production, distribution and exchange, but the various units within each division must likewise change their positions so that their efficiency will not be reduced through

mal-adjustment; furthermore, each business concern must correlate the forces within its own organization if its product is to be made economically.

It is to this last point in the industrial organization that this chapter will direct attention. Whether the business enterprise is represented by the wholesale house, the department store, the small retail store, or the factory, the organization must adjust itself to the system of mass production. The organization of a manufacturing concern is chosen since certain problems pertaining to capital and labor arise here that do not become so prominent in the other enterprises.

It must become evident very soon to one investigating the essential principles underlying the organization of the manufacturing business that many forms of organization exist, and that any attempt to generalize must be confined to the few basic principles according to which the various forms are erected; and to a statement of tendencies prevailing in representative industries.

74. Fundamental principles of factory organization.—To maintain his profits under the prevailing conditions of competition and mass production, the manufacturer is compelled to extend his control over the market for the raw materials necessary for his product, and over the market which takes his wares. Both of these movements have increased his expenses and in neither case could he do it profitably unless the extension enabled him to produce more goods or permitted the same bulk to be handled by fewer men or more efficient methods. The thing aimed at in either case is the same—the reduction of cost per unit of output. This process of integration has had important effects upon the internal organization of the manufacturing establishment.

The key to the subject of factory organization is

specialization, standardization, duplication of standard parts, and system. These terms simply reflect the ideas embodied in the expressions—division of labor and so on, which are prevalent in the larger fields of industrial activity. It is the vocabulary from the point of view of the shop or factory rather than from the view point of the economist.

75. Predetermining a business enterprise.—Before taking up the application of these principles to the factory organization, there are certain features of the business that need attention. Capital, when once put into a manufacturing plant, becomes fixed. It cannot be withdrawn at will. It becomes necessary so far as possible to predetermine the success or failure of an enterprise; and by so doing offer protection to these large capital expenditures. The success of the business venture depends upon many conditions, but in general they will be covered by a consideration of the sources of raw material of manufacture, of the sources of power, of the market from which labor must be drawn, the market for the product, the physical surroundings, the transportation facilities, and in some cases the reorganization of existing plants.

The necessity for establishing a business so that it will hold the correct relation to all of the above factors is pressing more and more upon every enterprise. The ideal combination can seldom or never be attained. It is these countless combinations which must be considered that stand as the greatest obstacle in the way of managerial monopoly. The largest of modern trusts is continually on the alert to discover the shifting of these relations so as to be prepared to meet the attack of some capitalist who is ever ready to take advantage of any weak spot in the existing organization.

76. *Source of raw materials.*—The location of the raw materials of industry has always been an important influence in deciding the building spot of a manufacturing plant. Especially has this been true in those industries where raw materials must be handled in large quantities. In the process of manufacture the bulk is reduced. Thus a great saving is made by using the raw material as near as possible to the source of its production. The advantage is in the difference in the cost of transporting the goods after their manufacture rather than before. The great flour mills have followed the wheat fields. There is a tendency for the steel mills to gravitate toward the iron mines. The cotton mills are seeking the cotton fields. Still this is not always a safe rule to follow. The greatest flour milling company in the world has gone into the hands of a receiver because of the competition of mills that have but recently established themselves, not on the edge of the wheat producing belt, but in the midst of a region which was made barren of wheat when the great northwestern wheat fields and flour mills were opened up and established. The explanation is simply that the relations of the various factors in the organization of the flour milling business have changed. It pays, therefore, to build mills in London, Liverpool, Manchester, and in other market centers. The price of flour and the price of the by-products have both risen, and the cost of transportation has steadily declined.

77. *Source of power.*—This, like the location of the raw material, is a fundamental consideration; but it cannot be considered by itself alone. It is often a difficult question to decide whether to move to the source of the raw material supply, or to the coal field and water-fall. The location of the steel works in Pennsylvania seems

to be ideal from the point of view of the location of the raw material and the fuel supplies. The discovery of iron mines in the northwestern states somewhat changed the relationship of the factory to these two factors. With the development of the market in the western states, another element making for a disarrangement of the older relations was injected. The building of the great steel plant at Gary, Indiana, is probably a resultant of the effects of these various forces which have only recently become active. It has divided the distance between the raw materials and the fuel supply and has settled in the center of the greatest market of the near future.

78. *Labor market.*—Although this is one of the most important considerations in determining the location of a plant, yet it is a question which is more and more coming within the scope of business policy to solve. How far a business policy is effective in breaking down barriers of distance between the plant and the source of the labor supply is illustrated in the case of the coal mines and steel mills. Neither distance nor previous conditions of employment stand in the way, for it is a remarkable fact that these great industries depend upon agricultural laborers drawn from a labor market situated thousands of miles away in central and southern Europe. Still for the ordinary enterprise, the labor question is the most difficult to solve. The cotton mills of South Carolina have not yet solved it, but the business policies which are being put in operation are showing good results. Business methods pertaining to labor will be treated more specifically under the wage systems and industrial betterment.

79. *Market for the factory's output.*—Here again the factory is brought face to face with the transporta-

tion question. If the policy of the company is to control a small or local trade, there will be a great saving in expense if the middleman can be put aside and the selling done directly to the purchaser. This control and influence over the market is further desired because it enables him to put his goods upon the market when the demand is ripe.

80. *Transportation and its relation to factory location.*—This great commercial factor has re-distributed the trade centers of the world. The transportation has changed from the carrying of high-priced articles in small packages to the transporting of low priced commodities of great bulk. The character of a business should, therefore, be the determining factor in selecting a method of transportation. The relation of the railway to the market has such an important bearing upon the success of an enterprise that no pains should be spared in determining the question of rates of transportation before starting a business. A location, therefore, which has several competing railroads and waterways, has the most essential elements established for maintaining of low rates.

In deciding upon the location, transportation should be looked at from two points of view.

(1) The character of the business may demand water carriage, or it may require one or more railways. The lumber business is best served by water connections; the cement business by several lines of railway. Most businesses are best served when they have the heavy raw material and fuel brought to them by canal, and the manufactured product taken away by one or more lines of railway.

(2) The transportation of labor to and from the factory is the next consideration. Even in cities this is an

important factor. Laborers often live at great distances from the works. Sometimes a certain location is chosen because the land is cheap. Here there may be a railroad line which delivers freight once or twice a week, but no street car or other way of carrying the laborers nearer perhaps than within a mile or so of the works. One business which had proved a failure presented these transportation conditions exactly. It was found that the men had to get up at 5 o'clock in the morning to rush off and get a trolley which ran but once a day. At the end of the ride there was still a mile and a half to walk. It resulted in tiring the men before the day's work began. This particular case was complicated by the presence of a tavern which the men had to pass. Before the factory could be put upon its feet, a stage line had to be established between the trolley and the plant. This led a better class of workmen to the shops and resulted in improved workmanship, which justified a higher rate of wages. The point to be observed here is that the whole reorganization depended for its success upon the question of the transportation of the workmen.

81. *Physical surroundings.*—In treating of the physical surroundings and of the reorganization of the plant we are brought closer to the particular arrangements in and about the factory itself. If the broader relations of the location have been decided upon, there still remains the local environment, and it is at this point that the business relations in the restricted sense become the subject of our present study. The influences exerted by these factors will be seen directly in the productive efficiency of the plant. Many questions, such as the following, should be answered before a locality is chosen. Can a proper system of sanitation be installed? Is there good drinking water, and is the water free from

acid or alkali for service in boilers or whatever other service required of it in the manufacturing process? Are there proper sewage connections and drainage facilities? Is there plenty of room to care for waste products? Is the ground upon which the factory is put composed of quicksand, or is there a sub-stratum of clay which prevents the water from running away? These are only a few of the many things that may turn an otherwise favorable location into a very undesirable one. One has only to think of the many considerations that arise when a meat-packing concern is to be built, in order to see how varied and numerous are the problems under this score.

82. *Reorganization of existing plants.*—In the establishment of an organization there are three considerations in connection with the plant itself. (1) Is the building to be used for a new business? (2) Shall the new factory be built to accommodate an old business that is already established, but is to move to a new location, or (3) has the new factory to be made so as to take over a business that has outgrown its old facilities and opportunities?

In case it is a new business there is the advantage of being free from old precedents and policies and old situations; but on the other hand, there is the great problem of the uncertainty attendant upon an untried market for the product. Before a factory is built it is well to test the demand for a new product. Many new products find themselves supplanted very early by a competitive one. To lessen the risk incident to a new venture, factories have been established in different parts of the country which make it their business to take up a new mechanism and to make all the tools, drawings, molds and special machines that may be required

for turning out a new product. They will continue the manufacture until the product has been standardized and until there has been a fair test made of the public demand for the output; then the company will turn over all the tools, machines, etc., to the new company, which in all likelihood has erected its building in the meantime.

83. *Comparative advantages of the city and country.*—A manufacturer should not decide the question of location for a new plant until after he has investigated the various advantages of the city, the suburb, or some locality which has probably offered inducements in the nature of a bonus, or freedom from taxation for a period of years. The city offers advantages in the way of labor supply. To many employers this is the prime consideration. They desire to be independent of the laborers. If a man is discharged or leaves, the manager knows there will be a long list, or perhaps a line at the gate to select from the next morning. Then, too, the city with its large number of interests can be counted upon to act as a store house from which fuel or supplies can be drawn at a moment's notice. On the other hand, the laborers of the city are often strongly organized into unions, and wages are kept high by the competition for labor by many other firms. The factory which pays the best wages gets the best help. There are many examples of successful firms that have established themselves in great cities. The Baldwin Locomotive Works at Philadelphia is an illustration of this type.

The advantages of the small town or the country are in direct contrast to those of the city. Larger and more commodious works can be built; and "welfare" work can be adopted on a more extensive scale. The country, with its rural surroundings, offers the many opportunities in these directions. Labor is generally cheaper, as

many people prefer the country to the city with its crowded and unhealthful tenements. But a strictly rural location means that the company must provide housing accommodations for its working people; and thus many administrative difficulties arise. The position of the factory surrounded by its own work people puts the management in a hard place when labor disputes arise. The discharged man has the sympathies of his neighbors. It is hard to evict a person, as such a course leads to scandal. The Pullman strike of 1894, under such conditions, led to a lowering of wages but not of rents, and the scandal did much to injure the enterprise.

As the population increases and the community grows older, the company will have to meet educational problems. Not only elementary schools but high schools will be demanded. Social and religious questions and disputes will affect the factory management; for the employés will not be of the same social ranks or beliefs; and last, but not least, political capital will continually be made of the company's position, and demagogues will never fail to decry it as a great oppressor, which "owns the men body and soul." Bickerings of this nature disgust many of the better men and they go to the city where the advantages of city life can be obtained, and with it, independence. In England, the best example of recent years of the tendency to desert the city for the rural conditions is that of the printing plants; but it is a well-known fact that when a printer who has a country workshop wants the best work done he sends to London.

Of course these considerations apply only in cases where a company has a choice of location and is not bound by circumstances to build in some specified place.

In England it is not a matter of choice, and as America becomes older, the freedom in this respect will become narrower. Frequently, in both England and the United States, the choice of location is restricted because the new works are the result of reorganization rather than new ventures. The old works may abandon the old site entirely and move to the country or suburb, but frequently old associations and habits of management overcome the considerations of economy offered by removal, and although they suffer from a manufacturing point of view, they seem successful in carrying out their policy. But this is generally a victory of mercantile management over the technical considerations.

These works are of two kinds. (1) There is the storied type where the work is carried on in an old building of three or more stories, which was not made for manufacturing purposes, but was turned into a factory through change of circumstances. Then, too, these old buildings may have been erected when manufacturing conditions were very different from those of the present time. (2) There is the scattered type, which owes its development to opportunities to build around a lot or yard or garden. When the limit was reached in this direction, new works were perhaps desired and the plant was extended by the use of property across the street for the purpose. Both types are more common in England than in the United States, yet they are by no means rare in the large older cities of America.

84. *Design of a modern plant.*—The modern plant is not built along the lines of the above type, which was often so scattered that one department might be in several buildings. To-day plants are built so they can expand and still retain the principle of unity embodied in

the small plant. The plan is to bring in the raw material and let it pass through the factory without doubling on itself during the successive processes of manufacture. The extent of the plant will be the result of many considerations, the size of the output, etc. The allotment of floor space will be made after a consideration of the kind and number of buildings to be erected upon a given space. In regard to the question of the subdivision of the floor space a compromise is often made in the case of engineering firms by adopting the alcove or side aisle arrangement, whereby the big things are located in the center, and on the sides the subsidiary processes are carried on instead of in separate buildings.

In the lay-out of the plant the proper balancing of the various departments is very essential. By this is meant that the machines in one department should not be so numerous as to produce more rapidly than the other departments can dispose of its product. It is only after a very careful analysis that the proper size of rooms and balancing of the different departments can be determined before hand. Yet it should be done in order to avoid a subsequent rearrangement of the whole interior. The older plan of making all the rooms in the factory of about the same size has proved disastrous so many times after the factory was started, that few men would think of following this method to-day.

An example of the old method is instanced in the case of a certain watch factory. The arrangement provided for the complete making of a watch of a certain size in one room, and of other sizes in another room. The operatives in each room became expert in turning out one particular style and size of watch. Failing to make this plan pay, the factory was put into the hands of a new manager. He rearranged the machinery

throughout the whole factory. All the machinery doing the same kind of work was put into one room. For example, all drilling machines were put into one place, all stamping machines into another, etc.

This brought about a new kind of specialization among the operatives. Instead of turning out a particular kind of watch, each operative became a specialist in one kind of process. It also brought about a new alignment of work. Where there had been one man in each room who did the stamping for the machines in that room, now all the stamping machines were grouped together and it was found that one man could attend to four machines. A little later it was discovered that a girl could do the same work as well as a man, and indeed it was not long before one girl was attending to six machines with less effort than was formerly made by the man with four machines. This was accomplished by putting a chair on wheels in front of a row of machines, so that the girl could be seated and still go from one machine to another by pushing the chair.

85. *Transmission of power. Tool room. Store rooms.*—If the factory uses electrical power it is considered the best arrangement to group the light machinery together and put the heavy machines by themselves. The latter should be placed on the ground floor, where the heavy product can be brought in. The lighter machines can be put on the upper floors.

The plan of the factory should provide for a tool room. Tools should not be left lying around to be lost or stolen. This room ought to be placed so that tools can be easily supplied to the operative without loss of time. It should not be necessary for him to leave his machine, but by pressing a button a boy from the tool-room can be summoned with the required tool. Me-

chanics do not as a rule supply their own tools. This is done by the factory which keeps a carefully indexed record of every tool, each man being charged with it until he returns the tool to its proper place.

Storerooms should be arranged for in the preliminary plans. Three classes of storerooms are desirable, each to care for the product in its three principal stages of manufacture—the raw material, the finished wares and the partially completed goods. Rooms for housing the partially completed goods may be called departmental store rooms. Their chief function is to provide a place for the inspection of the semi-finished product of each department before it goes on to the next. A system of inspection of this kind provides for the inspecting of the goods before they are fully completed and ready for the shipping room. The work of each man is thus inspected as it passes from one to another, and when some piece of work is found to be defective, the operations upon it can be stopped until it is remedied; or if the defect is a fatal one it can be cast out altogether. This is an important consideration, for if the inspection were delayed until the article was finished, all the operations after the defect occurred would be a pure loss.

86. *Standard equipment.*—While the subject of tools and their arrangement is under consideration, it may be well to mention another essential that should be provided for in the lay-out of a plant. Frequently there will be found in a machine shop a number of similar machines which differ from each other only in non-essential parts, as they are products of different factories. Provided these machines all do the same work there is a saving in expense if they are all alike. For example, lathes are nearly a standard product, but every manufacturer has his own ideas about the size

and style of screws, or the size of the countershaft, etc. A shop which has a half dozen lathes from as many different firms must keep in stock one or two extra parts to provide against breakage for each lathe. By having standard machines of the same make in use, the cost for carrying repair parts will be lessened and often much time saved through avoiding shut-downs.

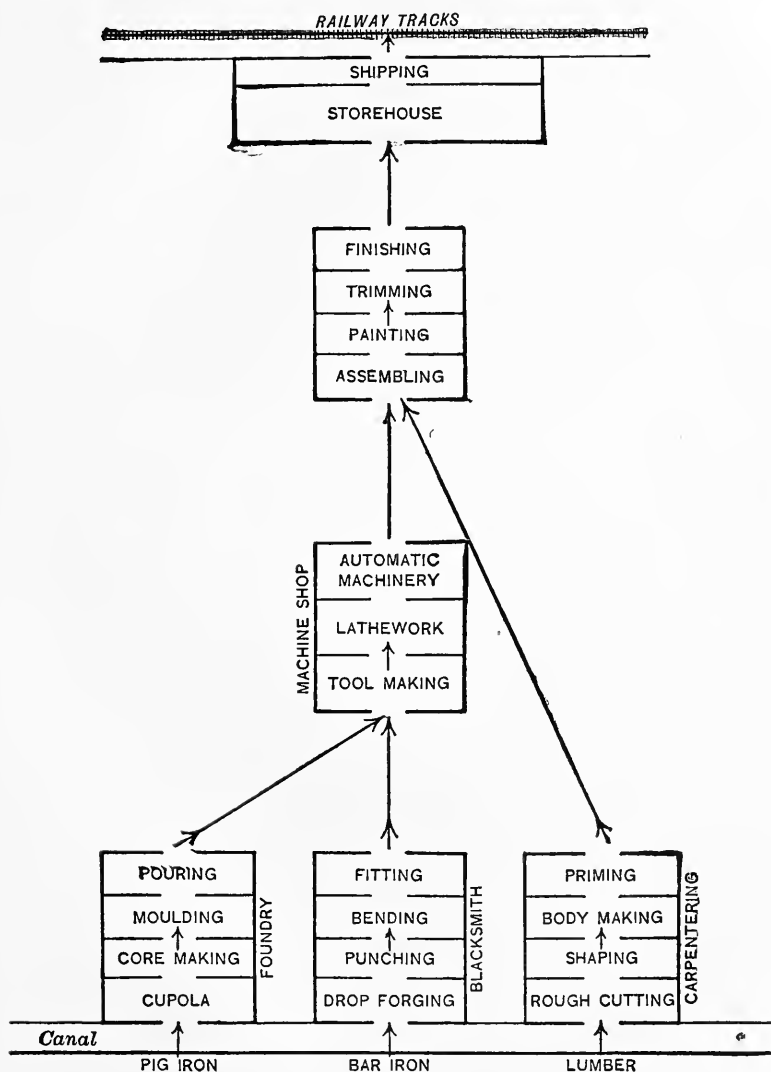
It might be added also that the substantial tool is the most economical in the long run. The light and cheap tool will produce inaccurate work and thus destroy the very purpose for which the product is designed. The appointment of an expert purchasing agent before the factory is fitted out, is almost as essential as planning the design of the floor space and transportation. He will know the difference between a cheap machine costing a small sum and a cheap machine in another sense, which, while costing a little larger sum at the beginning, will more than make up for the extra cost by producing better goods and lasting longer in the service.

87. *Transportation within the plant.*—As the original location of the plant is largely a question of economical transportation, so the location of the machines within the plant is largely determined by transportation requirements. The work should progress in one direction continuously and with as little handling as possible.

Transportation facilities at the plant may be divided into external and internal. The buildings should be so arranged as to facilitate the bringing in and taking away of the goods, while the internal lay-out should be such as to keep the goods moving in one direction in harmony with the outside transportation arrangement.

The following chart will illustrate the arrangement of buildings for carrying out the scheme of continuous movement in the same direction, and the logical ar-

rangement of the departments in order that the manufacturing process may harmonize with the scheme of



transportation in converging upon the shipping and loading side of the works.

As the raw materials arrive by way of the canal or

other water conveyance they are taken into the store houses. Then they pass through the various processes in the foundry, in the smithy, and in the carpenter shop. The products of the foundry and smithy meet in the machine shop where the manufacturing processes are taken up with the same progressive movement toward the loading side of the plant. The machining processes completed, the product passes to the assembling room, where it meets the wooden parts all ready to be put together. Other processes here turn out the article completed and ready for the storehouse and shipment.

This is one arrangement which of course would be modified to meet conditions. The same logical arrangement, however, would not change, for the continuous forward movement without any retracing of steps, is the basis of scientific organization. Even in a city where space is scarce and the arrangement of the plant is vertical instead of being horizontal, the logical order of processing would be the same. Here the raw material comes in down stairs and proceeds upward through the departments until it comes out a finished good at the top. It then comes down and is shipped out.

For the transportation of the product through the plant it is customary to have narrow gauge railways connected with the track that brings the product to the plant. Various kinds of trucks convey the product from one department to another.¹ Frequently there are overhead trolleys which obviate the necessity of having

¹ Both switches and turntables are used, but the latter are liable to get out of order. They are cheaper, however. Some experts advise the use of large wheels, claiming that the trucks run more easily. In many cases the overhead trolley with the pneumatic hoist is a very profitable combination, especially if heavy materials are to be loaded or unloaded. Such an arrangement can be operated either by hand, compressed air or electricity. The system of transportation also provides for carrying away the waste product from every machine. This waste is carefully weighed and

a man to load and unload the truck. When a truck comes to a man at a machine he takes out his material, and when his work upon it is completed another truck comes alongside and carries the product to the next man. This system saves much time and work in the handling of the material.

The transportation of small products is often provided for by the use of traveling belts. As the product passes along it can be taken off by the men at the machines; as each man completes his work upon it, the belt carries it on to the next. This is a favorite method in the manufacture of food products.

88. *Conveyance of internal information.*—Transportation is not confined to the conveying of materials alone. The question of carrying intelligence is one that must be solved also. There is no time which the average business man begrudges more than that lost in getting information or conveying it to his subordinates and others. The messenger service is the commonest form in large concerns, although many firms use all the familiar means, such as the telephone and whistling tubes. One unique method to call the superintendent or some other official, is to blow the whistle, which can be heard all over a large plant, and by a schedule of signals—one whistle for the manager, two for the foreman, and so on—much time can be saved in calling these men when urgently wanted.

In some factories the messenger service provides for the sending of a boy from one department to another every hour or half hour. He takes messages and inquiries from one foreman to another on one trip, and brings back the answers on his return. This makes it a record kept of it. In this way the efficiency of the man is determined, for it can be found out whether he is wasting the product or not.

unnecessary for the foreman to leave his department in search of information.

89. *Summary.*—In summarizing the points included in the preliminary determination of the location and design of the plant, it will be seen that the first problem to attack is the determination of the nature of the product to be manufactured, and to classify the various raw materials that are to be used. When this has been decided upon, and when it is known how the processes necessary in manufacturing the article follow each other in their natural sequence, the various departments may be planned and the floor space assigned to each department. Finally, after it has been settled how the space is to be equipped with machinery for the manufacturing processes and the transportation systems, the walls of the building may be erected.

The basis for the organization has now been established. There remains the classification of the various activities as they are related to the fundamental principles. The first function that naturally differentiates itself is that of administration; the second, that of manufacture; and the third, the commercial activities connected with the production and the disposal of the product. The various systems of accounting and of gathering information will naturally be influenced by a consideration of these fundamental divisions.

The following outline will show the various preliminaries in the procedure of preparing to manufacture a certain product:

1. The plans. These include the exact determining of whatever is necessary for efficient service in the productive operations, and their most effective arrangement.

2. The provision of the various things necessary in the production of the product.

a. Buildings which are adapted to the desired operations or the manufacture of certain goods.

b. Appropriate machinery for this manufacture.

c. A power plant to drive the machinery and to heat and light the factory.

d. Machines and tools which are needed in the mechanical operations or by the workmen.

e. Other apparatus and any other appliances besides machinery and tools.

f. Patterns or designs or models to be used as guides in the manufacture of the goods.

3. The operation of the power plant and the machinery.

CHAPTER IX

DEPARTMENTAL FUNCTIONS AND ORGANIZATION

90. *Basis of departmental divisions.*—The previous chapter dealt with the various factors to be considered in laying out a plant. It is presumed that the incorporating of the business under state laws, the financing of the enterprise and the duties of officers pertaining thereto have also been properly attended to. It is now necessary to determine upon what basis the electing and appointing of the various authorities shall be established so that the duties of each will correlate and work in harmony with the others. If friction between the heads of departments is to be reduced to a minimum, it must be done by a scientific division of authorities based on business functions. Coöperation is thus induced naturally.

The question of selecting the men for the positions of authority resolves itself to a discrimination between them according to their natural or trained abilities to direct the activities pertaining to a particular business function. In order to make the proper division of a manufacturing business into departments, a chart displaying the geographical arrangement such as the one shown in the last chapter is often used. Another kind of chart is sometimes used by systematizers to display the various primary functions of the business, and to show their connections. The latter may be used as the basis of a third chart which may be made to show the various authorities and their relations to each other.

91. *Prime functions of a manufacturing business.*—

The prime functions of a manufacturing business are discussed under the following twelve heads:

1. CONTROLLING THE SUPPLY OF STOCK USED IN MANUFACTURING. (RAW MATERIAL.) This function is divided into

- (a) A general central control (main office).
- (b) Territorial control (branch or divisional offices).
- (c) Local control (sub-companies).

The order of authority is from the main office down. The sub-companies are organized individually to secure stock by mining, lumbering, local buying or other means and then to ship the same to the factory.

2. PURCHASING OPERATING MATERIALS AND SUPPLIES.

- (a) Buying.
 - (1) Contracting.
 - (2) Direct purchasing.
- (b) Ordering.
 - (1) Receiving requisitions.
 - (2) Approving requisitions.
 - (3) Placing orders to fill requisitions.
- (c) Approval of invoices.

The department is controlled by a manager or general purchasing agent, who is assisted by special buyers. These have charge of certain classes of material. The buying is done in some cases by making time and approximate quantity contracts—often by a purchasing committee—with the sellers. Most of the small purchases which are in great variety are made directly after securing competitive prices with the individual. The receiving of requisitions includes the filing of them and the acknowledgment of their receipt. The approving of requisitions involves the checking of the same, if made to replenish stores, against present inventory, past

purchases and consumption, and probable future needs. But if it is made to obtain material of a special nature, or for a special job or order for goods, then the checking is against the works order or against the need as stated by the proper foreman. The object of this is to prove the business necessity of the filing of the said requisition; it also reduces the inventory of materials at the works.

The placing of orders to fill approved requisitions is, for materials under contract, a matter of routine, but for individual and special material not under a supplier's contract it is a matter for the manager or one of his assistants.

3. TESTING. The functions of testing are to establish standards according to which formal specifications or requirements are set and must be met by suppliers or workers. The testing department examines and compares the quality of materials received at the factory and the quality of the products of the factory, with approved standards. This function often extends to making trials or tests of equipment, such as machinery, boilers, engines, apparatus, formulæ or methods of manufacture. As a result new and improved processes of manufacture, or new or better machinery and tools are developed. The department of testing makes special or periodical reports to the manufacturing, purchasing or other departments which embody the results of its trials or tests, and advises upon the acceptance or rejection or the grading of materials and products.

4. EMPLOYING. This function embraces the supervision in general of all matters pertaining to employ  s of the factory other than the direction of their productive activities. These matters embrace:

(a) Hiring. This is done by an employment bureau

which receives and files applications for work, and engages laborers of the best ability and character obtainable for the foremen.

(b) Recording. The bureau records the main facts pertaining to each employé as a person and a worker. Data is taken regarding name, age, experience, references, occupations, rates of pay, dates of starting and leaving, social and physical characteristics, and conduct and efficiency as an employé.

(c) Instructing. This pertains to the duties that the worker is to perform in order that he may secure proficiency and efficiency as soon as possible, and that losses through accidents and waste of material may be reduced to a minimum. The bureau sometimes supervises the instruction but most commonly the foremen or functional bosses assume the responsibility.

(d) Rating. Wages are fixed by the bureau or under their supervision on the basis of the specific occupation, by specific agreement between employé and foreman or in accordance with whatever special system of wages the factory may have adopted, such as piece work or premium systems.

5. SELLING. The function of selling embraces the securing of orders, estimating, ordering and advertising.

(a) Selling—i. e., securing of orders from customers for production and shipment to them at specified times of certain goods at agreed prices under stated terms.¹

(b) Estimating—i. e., valuing by calculation and expert appraisal the cost of producing specific articles desired by customers. This function comprehends the

¹ The reader's attention is especially directed to the chapter on sales in the volume on COMMERCIAL LAW, where the legal requirement of the statute of fraud with regard to the sales exceeding the amount of \$50 is treated.

fixing of a price at which the goods can be sold at a profit.

(c) Ordering—i. e., sending a formal statement to the manufacturing department of the customer's accepted request for goods, and the following of it to see that the order is filled.

The procedure is as follows:

- (1) Receiving from customers the requests or orders in various forms.
- (2) Transforming and copying same to and on a standard form.
- (3) Filing copies.
- (4) Forwarding the orders to the manufacturer's department.

The various forms of orders are:

- (1) Contracts covering a period of time or a certain quantity.
- (2) Requisitions on contract which may be periodical or irregular.
- (3) Transient or individual orders filled generally at one time.

(d) Advertising. The giving of information to customers, the trade and the public, regarding the products of the company, in order to secure orders.

The selling department is managed by a manager of sales, aided by assistant managers, each of whom is in charge of a certain class of goods and is at the head of a specialized division of sales. The operations are conducted through the main office. The branch offices are managed by sales agents. These agents have control, subject to the direction of both the manager and the assistant managers, of the company's business with the customers within a certain territory.

6. **WAREHOUSING.** This function includes the storing of goods.

(a) The storing of parts or partially finished articles as they are received from the foremen of certain departments but which will be required later on in other departments.

(b) The storing of finished goods which are delivered to the warehouse for immediate or subsequent shipment to customers.

A system of checking and inspection may accompany the function of warehousing. The partly finished goods are checked against production orders and normal requirements and they are accounted for in a similar manner to stores. The system of inspection may follow the goods into the intermediate store rooms.

The finished goods are located, inspected, checked against orders, packed and shipped in accordance with shipping orders and routing instructions. There are many devices whereby proper stocks consistent with the requirements of the sales department are maintained.

7. **TRANSPORTING.** This function pertains to the directing and the forwarding of goods.

(a) The department provides:

(1) Cars or boats.

(2) Unloading, transferring or storing facilities and equipment, including the necessary help.

(3) Trucks and wagons for delivery of goods.

(4) Routing instructions to shipping clerks and railroad agents.

(5) The department is responsible for the safe and prompt delivery of goods at the proper destination.

(6) In case of unsatisfactory service it makes

complaints and pushes the claims against the carrier.

- (7) It endeavors to secure the best terms practicable for special service, and at all times to give the company the benefit of the lowest transportation rates in forwarding goods.
- (8) The department approves all bills from transportation companies.
- (9) In general the department controls all dealings between the company and all transportation, lighterage, steamship, storage and trucking companies which handle the output of the company, or which ship the raw and operating materials to the works.

8. **MAINTENANCE.** This covers the upkeep of the property including repairs and renewals, both ordinary and extraordinary.

- (a) Buildings and grounds.
- (b) Machinery, tools and apparatus.
- (c) Boilers, engines and power generators of any kind.

9. **IMPROVEMENT.** This department controls the replacing of existing buildings or equipment with improved types and greater relative efficiency. This work is done in connection with the two departments of maintenance and of manufacture. The latter may request an equipment which will enable them to reduce the cost of production so as to meet competition, or increase profits. The work is similar to maintenance and yet it is of such a nature that it cannot be chargeable directly, at least, at the time, to the expense of operating the factory. The doing of this work is a matter of policy, based on a judgment as to the relative profit before and after the change. Such work is often limited by the

financial ability of the company to incur the expense or by the wishes of the stockholders for dividends instead of an improved plant.

10. **CONSTRUCTION.**—This covers the work of providing the factory with buildings and equipment to start with and then of providing properly constructed, arranged and equipped buildings of various kinds as the business grows. This department may be complete as a creative agency, or may only go as far as the planning of the work to be done. The functions of maintenance, improvement and construction are often performed by one department, sometimes with and sometimes without specialized divisions.

11. **EXECUTIVE.** The function of financing and planning the enterprise is given to the executive department.

- (a) The directors, elected by stockholders.
- (b) The executive committee.
- (c) The finance committee.
- (d) The president.
- (e) First vice president or general manager.
- (f) Experts.

12. **ADMINISTRATIVE DEPARTMENTS.**

- (a) Secretary.
- (b) Treasury.
- (c) Auditing.
- (d) Accounting.
- (e) Cost.
- (f) Statistical.
- (g) Real Estate.
- (h) Legal.

The various types of organization and management, found in the factories of the same and of different industries are the several combinations of these depart-

ments and divisions. The general plans according to which various manufacturing operations are carried on vary considerably. To such an extent is this true that no generalization or grouping is practicable except to a limited extent.

The following list of activities together with two columns containing descriptive phrases embody the principal characteristics embraced in any scheme of organization. It will be readily seen that any number of combinations may be made. For example, the control may be exercised by the owners, but under a system of management which depends upon the local branch offices for direct supervision. All kinds of production may be combined with either the military or functional systems of direction, etc., etc.

<i>Activity.</i>	<i>Plan A.</i>	<i>Plan B.</i>
1. Control	By owners	By salaried employés
2. Management	Local	From main office
3. Superintendence	Personal	Impersonal
4. Output	Simple	Complex
5. Production	Similar	Varied
6. Processes	Specialized	Standardized
7. Business	Competitive	Monopoly
8. Direction	Military	Functional
9. Instruction	Formal (in writing)	Informal (verbal)
10. Employés	Organized, i. e. (Labor Unions)	Unorganized
11. Wages	Piece or premium rates	Daily or hourly rates
12. Machinery	Hand	Automatic
13. Development	Progressive	Unprogressive
14. Evolution	Equal	Unequal
15. Growth	Systematic	Unsystematic
16. Methods	Effectual	Ineffectual
17. Results	Profit	Loss
18. Conditions	Past	Present
19. Forms	Actual	Ideal

92. *Duties of the officers.*—The first transaction of a business nature, as we have seen, is the selection of the

general officers of the company. The second is, logically, the choice of the heads of the three divisions, the executive, the selling and the manufacturing. The next step involves the selection of the heads for each division and the departments within each division. If the planning of the organization has been done on scientific lines these officers will settle into places, the principal relations of which are already established by natural conditions.

However, in cases where the activities of one department come in contact with several other departments, the practical problem of drawing a line that will define the boundary within which each authority shall be operative is a very difficult one. It is easy to see that the making of a bolt or casting relates solely to the machinery department, but the keeping of the factory accounts is not so easily allocated for it will reach into the selling, the financial and executive divisions.

In assigning duties to the various officers, it is not presumed that the following classifications are anything more than typical cases.

The president is usually the general supervising officer of the company. He presides at all meetings of the stockholders and at all board meetings; he signs all stock certificates and sometimes all other papers. He may, however, be chosen merely for the influence of his name, in which case he is only a figure-head, and a managing director is appointed to do the work. This figure-head type is rarer in the United States than in Europe.

The vice-president simply assumes the duties of the president when the latter is absent, unless as in the case of the railway company, he takes an active participation in the business.

The treasurer has custody of all the company funds and securities; he has charge of the books, and he oversees the vouchers and makes up the financial reports. In case there is an auditor, he is usually under the treasurer, and he will have charge of the company's books and will check up all accounts. There may also be a comptroller who is the author of and is responsible for questions pertaining to general accounting, cost accounting, systematization and so on. His relation to the board of directors, the executive committee and the president is the same as that of the general manager in value and expression. He becomes the chief authority in all questions relating to organization.

The secretary keeps the minutes of the company; he has charge of the company's seal, of the stock certificate book and other books; he looks to the issuing, transferance and cancellation of the company's stock, and makes regular reports.

The president, vice-president, secretary and treasurer are directly engaged in the corporate works of the company, except in the case of the treasurer when he becomes closely associated with the business end of the factory and has other duties than those connected with the corporate finances.

The general manager is in charge of the active business of selling and production. Under him are the heads of the selling and manufacturing divisions, namely, the sales manager and the factory superintendent.

From our point of view the general manager is the chief authority in the organization. He is "the main spring of the active business end of the company." He must possess certain qualities, such as a strong individuality, tact, resourcefulness, forcefulness, and at the same

time he must have a knowledge of the principals of organization and management. On him devolves the duty of selecting his subordinates, either personally, if he is in a small organization, or through a department if he is in a large one.

93. *Military method of organization.*—There are two distinct methods of directing the organization below the superintendent. One is the military form where the manager is practically the general of the army; he has under him, majors, captains and lieutenants who carry out his commands. Under this mode of directing, the staff must be trained to the manager's policy. If each foreman or other officer pursues his own policy there will be an unevenly governed organization.

Much depends upon the foreman's capacity to grasp the larger problems of the manager's policy. In arranging for the work of the foreman, it has been determined of late that the same process shall be adopted in developing efficient specialists here as was done in the case of the common laborer. Each foreman instead of having charge of a number of men performing many kinds of work, has now one thing to do. This was found necessary because capable foremen of the broader type were difficult to find. Such general work demands of a foreman that he have a fair quota of brains, some general education, fair physical health, some technical knowledge and some manual dexterity. In common with all administrative positions, his position calls for tact and judgment. He must have a knowledge of every part of the product; he must see that the workmen use their time for the best interests of the company. He must be a "hustler" himself and he must know how fast other men can work. His duties embrace the dis-

ciplining of the man, the settling of disputes between employés and the adjusting of wages in case of absence, sickness and so on.

Functional method of organization.—The difficulty of getting men of the proper caliber to take charge of the departments has set managers to devising a method or organization which calls for less ability in any one foreman. Accordingly the functional method of organization is gradually supplanting the military method. In an organization of this kind, a man possessing three or four of the above named qualifications can be trained to fill the position of a functional foreman. He is required to do only two or three things, and in the larger shops only one thing. This does not mean that the same amount of ability, taking the shop as a whole, is not needed under the functional plan, but that it is organized differently. All the ability which is needed for planning is concentrated in a planning department. The shop foremen are no longer expected to do this. In a fairly large factory there will be four foremen in the planning department, and another set of four foremen will be constantly upon the floor of the shop instructing and helping the men. This division of labor causes no confusion, for the workmen never see the foremen in the planning department. This illustrates how all the functions may be separated, and whereas the old system provided one foreman from whom a group of men took their orders, the newer method permits any workman to have as many as eight bosses.

94. *Organization of the planning department.*—In the first place the men in this department are of a higher caliber than the trained laborers who are foremen in the shop. The room itself is planned to provide for a series of panels and pigeon holes. Each section of a

panel with its hook and each pigeon hole represents a particular tool. As the work comes into the planning department from the departments of the shop it is divided up and put into the different pigeon holes. It is then ready to be given to another shop department for another operation. One man is put in charge of this work and his duty is to see that the tools as they come in are properly distributed and that the work upon them is kept going properly, for as one man finishes a piece of work the planning department sees that he is supplied with more. This man in the planning room gets to be very expert in filling up pigeon holes and seeing that there is work in them all the time. In a short time he is able to keep the whole shop going. If the work is not going in and out, from one machine to another, as fast as planned, the speed boss, of whom we will speak later, is called to explain the cause of the delay. On the other hand, if any of the pigeon holes become congested it means that some machines are working too fast or others too slowly and this calls for an investigation to see that the program as laid out by the planning department is carried through.

95. *Foremen of the planning department and their duties.*—The foremen in this department are the (1) route clerk, (2) the instruction card man, (3) the cost clerk, (4) the time clerk.

The route clerk plans the course which each piece of work is to travel on its way through the shop from one machine to another. He informs the superintendent of the various workmen, by means of written cards exactly what each workman may expect to appear at his machine at any particular hour during the day. Thus are the various shop bosses kept in touch with the chronological order of procedure and they know what must be

done if the work is to be produced in proper routine.

The instruction card man draws up another set of cards showing the number of the pieces of work which the route clerk had directed on its course from machine to machine. He supplies the cost order number on the card and puts instructions on it pertaining to the various tools and fixtures that are to be used on each piece of work in carrying out every process.

This card also gives instructions to the foremen as to what tools and fixtures it is necessary to supply the men with, and hence there is no necessity for the workman to leave his machine for any purpose during working hours. The tools are brought to him and the raw materials are delivered at his machine. By looking at his instruction card he knows just how to set his machine for the proper speed and proper feed. The thinking is done in the planning room and the functional foremen in the shop simply obey instructions.

The cost and time clerks formulate instructions for recording the time which each man is expected to consume in his work. For example: the cost clerk lays out in advance the length of time which each workman is expected to take in doing his piece of work. If, for some reason, the workman is unable to do his task in the time allotted to him, it becomes his duty to inform the shop foreman that a mistake has been made in calculating the time. The speed boss then takes up the matter, and if after examining the machine to see that no mistake has been made in its setting, he finds the workman's statement correct, he reports the case to the planning department for correction.

96. *Shop bosses and their duties.*—In the shop there are (1) the gang boss, (2) the speed boss, (3) the inspector, (4) the disciplinarian. These men can be se-

lected without difficulty and their training provided for if the manager has a clear idea of what he wants to accomplish.

The gang boss has no definite duties as such. He simply carries out such work as the planning department assigns him.

The speed boss sees that the work is carried out according to the schedule sent out by the planning room.

The inspector looks after the quality of the work as it comes from the machines. He must be able to instruct the men as to the type and quality of workmanship required.

The disciplinarian settles all cases of insubordination, and passes judgment upon the disputes which arise between workmen and foremen.

There is a fifth boss in some factories whose duty it is to keep the machines clean and in repair; and in addition he may be called upon to keep things in good order.

Functional organization is being strongly urged by some of the best accountants and industrial engineers in the country. Mr. H. F. J. Porter, one of the leading authorities upon industrial organization, in a recent paper upholding the above method, cites the following instance showing the results of this method:

In connection with a large foundry, we had men loading pig iron on cars by carrying it up an inclined plane. It had been customary to pay the men \$1.15 a day for carrying 12 to 13 tons of pig iron.

The lowest grade of labor had been doing this work. If a man applied for work, he was put into one of these gangs. The better men, as they proved themselves, were later taken out and put into the shop as machinists, etc. That left in these gangs only the young, untrained men, who were not particularly

strong, or the old men who were incapacitated for any other work.

The functional foremanship plan was introduced into these gangs and the laborers were taught how to handle the pig iron. A careful study was made covering a period of several weeks to determine just how fast the men ought to be able to handle the iron, pick it up, carry it a certain distance, get to the car, drop it, and come back again.

The work was divided into several processes and the men were encouraged by the prospect of increased pay provided the output was larger. A good many of the men resisted. They could not be speeded up. These were weeded out and others put in their places. They were urged not to overwork, but simply to do a fair day's work.

The result of all this was that instead of a man getting \$1.15 a day for carrying 12 to 13 tons, he averaged in a short time \$1.85 a day for loading from 45 to 48 tons—but these were an entirely different set of men from the ones we had started with.

CHAPTER X

INTERDEPARTMENTAL RELATIONS

97. *Course of an order for goods.*—Let us now consider the system by which the orders secured by the sales department from customers are converted into finished goods and how they are sent back to the purchaser. We shall assume that the sales department is located at the main office with a sales manager in charge and a corps of clerks as assistants. Under the manager come the district sales offices, each having a certain territory within which are located the traveling salesmen, the local stores or other means by which the company's product is disposed of.

Let us assume that the main office is located in Philadelphia and the district sales offices in various cities; one in Boston to take care of the New England states; one in Albany covering the territory of New York and perhaps that of northern Pennsylvania; another in Cleveland to care for the Ohio, West Virginia and Western Pennsylvania territory.

The district managers have under them the "drummers," who are either located at some important centers, or travel over the territory at important intervals. Each branch office may keep on hand a small stock of goods to be used as samples, or may run a store of considerable size. This branch system is also used in the instruction of salesmen, which is treated of under "Salesmanship" in a succeeding chapter.

We are now interested in the course which an order

takes through the factory and how it reaches the purchaser by whom it was given. We will suppose that the salesman has overcome all difficulties and secured his order. Various forms are used in sending the order to the factory, depending upon the character of the goods. The following will serve as a sample:

Date.			
The A. B. Company, Philadelphia, Pa.			
Gentlemen:			
Please furnish to the Purchaser Company at 100 Blank Street, Chicago, the following:			
Quantity.	Quality.	No.	Further Details.
Method of Shipment.....Mail.....Express.....Freight.			
Terms.....when shipment must be made.			

The orders received every day in the order department of the branch house are sorted. A careful record is made showing the number of sales, the various kinds of products and the different sales managers under whom the goods were sold. If the branch has the product in stock it will fill the order directly; if not, the order goes to the home office, where orders are grouped and the factory notified as to what should be manufactured.

When the order is received by the order department, it will be sent immediately to the shipping department, a duplicate going to the stores department. This duplicate serves as authority for the delivery of the finished goods by the stores department to the shipping department. When the goods are turned over for shipment

an inspector sees that the packing is done properly and that the final shipment is made in accordance with the order department's instructions.

In case the required goods are not in store but must be manufactured, the direction of the order takes another course. A copy is sent first to the superintendent of the production division. If the order calls for standard products he decides upon the number of parts that must be made, and notifies the different departments concerned in their production.

If, however, the order is for a new style or new product, the engineering department is consulted by the sales manager. A design is made and a factory order number is assigned to it, which number is retained until the finished article appears in the store room.

As an illustration let us take an ordinary steam valve. The parts of this article are one wooden handle, two brass discs, one cast iron body, two screws. The superintendent will order these different parts from the store room to the assembling room. The washers will be ordered from the press-room, the steel stems from the machine shop, the wheels for the valves from the carpenter shop, the brass discs from the brass foundry and the iron body from the iron foundry. If the screws are not in stock the purchasing department will be ordered to buy them. The order will go through the shop bearing the order number which has been given it. Each department will turn out its part of it and send it to the stores department. Perhaps there may be departmental store rooms; if so, then the inspector examines it at that stage of manufacture before the workmen get their pay. The stores department then turns the parts over to the assembling department. Having been put into its final form, the valve is returned to the stores department

for finished goods, and after a final inspection is ready for the shipping department, the district sales manager and the customer for whom it is made.

The forms that are used for carrying the work through the various processes which have been referred to are generally stock forms. They may vary in details in different businesses, but in general outline they are very simple.

Thus instead of sending an order through the factory calling for 200 valves, the order goes through calling for these six different parts—namely, 200 washers, 200 wheels, 200 stems, 400 screws, 200 cast iron bodies, 400 brass discs.

98. *Drafting department.*—Reference was made to the close connection between the engineering and sales departments. There also exists a vital relation between the engineering department and the shop itself. The character of the design is important, since all the processes necessary to produce the product will be shaped by it. Hence a design should not be decided upon until a thorough investigation has been made regarding its fitness for the market and the factory conditions governing its manufacture. Among the latter factors to be considered are the ease and cheapness of manufacture, the use of standard and stock parts, and the working relations between the several departmental authorities. One of the great drawbacks to economy, efficiency and progressiveness in many organizations, is the hostility that exists between the various departments. This hostility can be broken down to a large extent by having the draftsmen mingle constantly with the shop foremen, not only to establish a personal touch between the two departments, but that the draftsman may absorb all the shop and foundry practice possible. Designs that prove a

practical success soon gain the respect of the mechanic. Nothing gives a manager more assurance than to feel that every design represents the combined knowledge of the two departments. The shop men, from their shop experience and knowledge of past mistakes, can offer much that is beneficial. Such conferences will also facilitate better routing of the work through the shop. There may be a still further development due to this inter-departmental intercourse, namely, a thorough and profitable consideration of the re-design of the regular product. Goods of special sizes and quality can often be changed to a standardized product. Here again the sales department must aid the engineering end of the business by attempting to change public taste so that a standard article will be accepted in place of the individualized sort. Again, if the draftsmen are in close touch with the factory, they will be readily impressed with the necessity of designing parts that can be easily and cheaply machined and assembled, taking into consideration the types of machine tools that must be employed.

The confidence and coöperation of the shopmen can be further gained by having a rule that all drawings must be O. K.'d by the shop foremen before they are placed in the shop. The sustained interest of the foremen may be maintained by a system of reports which they must make based upon their actual experience while the product is passing through their hands. These reports may contain criticisms of the design or new suggestions.

In order to give regularity and vitality to such intercourse between the departments, some system of consultation should be devised. One eminently practical and successful manager appointed a committee consist-

ing of the head designer or draftsman, the head of the tool room, the factory manager, the important machine-room foremen and the head cost man. At times this committee was aided by the presence of the foundry man, the pattern maker and the stock man. Before this committee came all ideas pertaining to the new design or re-design of an old product. "The experienced shop manager," says Mr. Charles U. Carpenter, president of the Herring Hall-Marvin Safe Company, "has only to consider the usual maddening program of errors in data, mistakes in design, faulty judgment regarding economy of manufacture, lack of standardization of parts, and last, but by no means least, the covert hostility of the shopmen to the new productions of 'that drafting department,' to realize the possibilities which lie in developing methods which will insure accuracy, economy, standardization, and the interest of the machine foreman in the successful and economical production of any particular design."

99. *Tool room.*—The relation of this department to the remainder of the factory is most vital. The tool room has been termed "the heart of the shop." No factory, any more than the artisan, can do its best work with poor tools. The tool room is therefore responsible for the determination of what the maximum efficiency of a factory is. Not until the tool room is in a relatively perfect condition can there be established a basis for the determination of all these individual standards by which the efficiency of the various producing factors can be measured. The possible output, the lowest cost of production, a wage standard—all depend on the accurate determination of the lowest possible time in which each piece of work can be done. Upon the tool room falls the burden of starting the productive forces,

labor and machines, at a rate consistent with the above requirements.

To begin with, then, the tool room must meet certain tests. Has it a knowledge of the best results that can be obtained from the high-speed cutting tool steel? Does it know the proper shape and size of the cutting tool? Has it a knowledge of the character of the steel worked upon? Has it determined the greatest capacity of the machine tool used with reference to maintenance expense and depreciation?

The tool room is in reality a factory within a factory. It is a place for making tools that are to be used in the building of the finished machine for the market. All the methods, therefore, that apply to the organization of the factory proper will apply to the production of tools. Standardization, duplication, subdivision of labor—all apply here in principle as well as in the main organization.

100. *Local management versus direction from a distance.*—The relations which have been considered so far in this chapter have pertained chiefly to departmental functions. The method of management as a system of control has only been referred to indirectly by the mention of branch offices, etc. The changes which are going on in the method of management are in harmony with the general tendency to concentrate the control of industrial enterprises in the hands of a few. Local management has disappeared in many large companies; that is, the functions of management are largely performed at a main office, more or less distant from the factory, the latter being left in charge of a resident superintendent, who carries out the instructions of the main office and uses such equipment and materials as are given to him.

Local management exists where the different functions are performed by departments and divisions located at the factory. This condition of affairs is said to exist until the balance of power has been absorbed at a main office, which by the character of its orders show that the directing authority has been changed from a local to a centralized control. A main office may perform only a few of the functions or it may exercise all of them. The practice differs with the different companies. The advantages of this separation of the management from the factory lies in the fact that the business transactions are more readily carried on at a business center or a large city, and if the company owns more than one factory, centralization and specialization in management are to an extent productive of considerable administrative economy. Many of the functions can be as well performed away from the mill as at the mill. The telephone, the telegraph and the mail express have made this possible and easy. But, on the other hand, main office management tends to become formal and automatic. Indirect, impersonal and mechanical management has all the disadvantages incident to control on the basis of knowledge not obtained through the senses and by contact.

Some examples of separation may be seen in the movement to a main office of those functions which were associated originally solely with the factory. Briefly these functions are: the supply of equipment and raw material, the employment of labor, the manufacturing of goods, the storing, warehousing and shipping of same, and the maintenance of the plant. While it is not uncommon to find the executive and selling functions located at the factory, these will be the first to be moved when a separation is decided upon. The following illustrates this separation:

I. <i>Functions performed at the factory:</i>	<i>Functions performed at main office:</i>
Equipment.	Executive.
Supplying raw material.	Administrative.
Purchasing.	Selling.
Employment.	
Manufacturing.	
Stores and warehouse.	
Transportation.	
Maintenance.	
II. <i>Functions performed at factory:</i>	<i>Functions performed at main office:</i>
Purchasing.	Executive.
Employment.	Administrative.
Manufacturing.	Selling.
Store and warehouse.	Supplying raw material.
Maintenance.	Transportation.
	Equipment.
III. <i>Functions performed at factory:</i>	<i>Functions performed at main office:</i>
Employment.	Executive.
Manufacturing (part).	Administrative.
Stores and warehouse.	Selling.
Maintenance (part).	Supplying raw material.
	Purchasing.
	Manufacturing (part).
	Transportation.
	Maintenance (part).
	Equipment.

101. *Character of the controlling authority and its relation to the business.*—The control by owners is much

more frequent to-day than it was a few years ago. The advantages of a control in which the owner feels a personal interest and pride are shown in the greater vigor, freshness and energy of those concerns which approach most nearly to this form of control. The organization which is controlled by a salaried manager, to whom profits and loss are only of an indirect interest, tends toward formality and unprogressiveness. A salaried employé may have character, skill and ambition, but he lacks the interest in the company which the owner has. If the employé has a stimulus which calls forth his personal effort in addition to and distinct from his activity due to a desire to advance in the company and to retain his position as a means of livelihood, there is an approach to the more desirable condition of ownership control. Many forms of stimulus have been tried, few have been rewarded by success. The prevailing tendency to-day, aside from any disciplinary features of the organization is to rely upon human selfishness, ambition and social necessities to urge the employé to an exertion deemed satisfactory to his employers.

102. *Committee system*.—One method that is proving to be more and more a success is the committee system of management. It is an attempt to apply the same democratic principles of government to factory management that have proven themselves so successful when applied to the national and state governments. The primary idea is to enlist the coöperation of the men in the shop in forming plans and offering suggestions for the good of the company. By frequent meetings and a thorough airing of opinions an *esprit de corps* and a feeling of responsibility for the success of the business as a whole is established. In its method this system is

the opposite of the military method of management. The committee system is especially well adapted to furnishing a means by which the discontented can give expression to their feelings, and affords a valuable aid to the management in locating the cause of any disaffection. Furthermore, it is claimed for this system that it provides a method of overseeing whereby an executive totally ignorant of shop and sales processes is provided with reliable data concerning any weak spots in the production, buying or selling departments.

103. *Committees.*—The purpose of all committees is to act as advisory bodies only. The members of the committees should be composed chiefly of the foremen. The chairmen of the most important committees should in most cases be the factory superintendents. In cases where there are assistant superintendents, these may act as chairmen of the less important committees. In practice it has been found that five or six men form the ideal committee. Yet in some cases when it is deemed advisable to have some of the superior officers or factory experts present the committee may be enlarged, but in no case should the foremen be excluded.

The principal committee is the "main factory committee." Before this body come all the general questions pertaining to the shop. The superintendent acts as chairman. The secretary should be a stenographer and should be selected because of his ability to absorb the knowledge of conditions and to express an intelligent opinion upon them. Such a man will prove an invaluable aid to the executive. Other members of this committee should be selected because of their intelligence and progressive tendencies. The following personnel has been proved to be effective by some suc-

cessful managements: Chief designer of product, chief designer of tools, head of the cost department, and two or possibly three foremen.

One of the special functions of this committee is to advise upon promotions. The superintendent, of course, acts as a final authority in such cases but the fact that no "boss" is to have a chance to recommend a relative or friend unquestioned by the management, frees the minds of the workmen from feelings of unfairness and injustice.

The meetings of the committee should be regular and certain, and although the exact number depends upon the nature of the business, yet in most cases meetings should be held as often as twice a week.

The next committee, or rather set of committees, which follow the main factory committee in importance, are the subsidiary committee or committees. These appear when a company makes not only a main product but also some subsidiary product. Their duties will in general be of much the same nature as those of the general factory committee, but the scope of their work will be limited to the line of production in which they are engaged.

Each committee should be composed of the foremen in that particular line of production together with some of the main factory committee. It has been found advisable to have the same secretary serve on as many committees as possible.

104. *Meetings of the job bosses and foremen.*—An extension of the committee system is seen in those factories where the foremen hold meetings at frequent and regular intervals with their job bosses. Objection to these meetings is raised by some authorities on the ground that it takes the men away from their work and

retards production. In reply to this objection supporters of the system propose that the meetings be not too frequent (twice a month is sufficient) and that they be short and to the point. They claim that any loss due to slackened production will be more than compensated through increased harmony and the dependence which can be placed upon the bosses. In the last analysis they say it rests upon these men to carry out the plans of the management. The bosses control the labor situation in the shop and strongly influence the attitude of the laborers toward their work. Furthermore, these meetings not only afford a good schooling for the bosses, but they offer the superintendent an excellent opportunity for judging the men from whom he must select his future foremen.

The general foremen's meeting is another of those meetings which are thought by some to be unnecessary; on the other hand, many important firms consider it to be one of the most important means of efficient management. The purpose of this meeting is to furnish an expert body before which the various shop practices and policies can be discussed. A foreman in defending some act of his department which has retarded progress will not be inclined to use falsehoods or extravagant arguments if he knows his statements are to be listened to by a body of men well acquainted with all the conditions.

The basis of discussions in the majority of such meetings will lie in the consideration of the departmental records. It is in the defense of these reports by the different foremen that many new plans are suggested which are later developed to the great benefit of the company.

Many devices might be suggested as aids in presenting matter to the various meetings of this kind. One

method has been the use of a folding blackboard. Orders from an executive officer pertaining to some work which is especially desired to be developed under certain conditions is outlined upon this blackboard so that each foreman knows exactly what is expected of him in carrying out the plans. By this means the foreman is urged to do his best for he knows at the next meeting this blackboard will stand as a mute witness of his success or failure in the presence of his fellow foremen and his superior officers.

105. *Work of the committees.*—The work which will form the basis of each committee discussion must be in harmony with the purpose of each committee. The following, however, will be suggestive in showing the fundamental problems which must in some form or other be considered:

1. Routine work and report of progress.
2. New designs and inventions.
3. Cost reductions and economy.
4. Plans to standardize products.

CHAPTER XI

OFFICE SYSTEMS AND REPORTS

106. *Basis of office organization.*—The two physical factors in office organization are the number of people to be employed and the space necessary for them. But numbers and space are not the first things to be considered in planning an office system. Here, as in the factory, the natural functions that are to exist for the best conduct of the particular business must first be determined. The determining of the groups and the work which each group shall do is the first step in the office organization. Lay out the work to be done, determine the number of persons to do it, assign to them their duties and the requisite space to work in, and then erect an “office” around them.

107. *Planning the administrative offices.*—First comes the department within which the general one of administration is to be exercised. This department will embrace all the administrative offices without regard to the fact that the officers may perform specific duties connected with a special department later on.

The divisions in this department must first provide for the handling of all papers and letters received, copies of all letters mailed, and the duties incidental to distributing, filing and mailing. This department is known as the filing and mailing department.

Another department will have charge of the opening and assorting of the mail, the stenographic force and so

on and may be known as the correspondence department.

The sales department, which is considered at length in Part III of this volume, is also one of the office divisions.

The accounting department embraces two separate lines of work; (1) that connected with the commercial end of the business and (2) that pertaining to the factory. Both are under one administrative head, however.

Next in order comes a series of departments which are closely connected with the factory organization. Still in planning an office system the relations of these departments to the general administrative department must be considered. These are the purchasing department, the customers' order department, the producers' order department, the shipping, the receiving and the stores departments.

Under the administrative department which may have a treasurer and an auditor or comptroller as the executive head, come the departments of cost, statistics, invoicing, credits, collections, claims, filing and mailing, office supplies and services, payrolls, customers' order department and shipping department. Such an organization may be modified to suit the particular features of a business, but in general outline it is fairly typical.

The organization of the office has not as a rule been subjected to the same amount of study as the factory; yet there are many firms which have reduced their office procedure to such a state of effectiveness (the activity being so nicely balanced and proportioned) that one may speak of their office methods as being standardized. Such firms have a written constitution and by-laws for their office procedure. These rules are formulated in

simple and direct language by the administrative head for the guidance of the various departments. They are the standard and recognized rules of procedure.

In order to still further promote intelligent coöperation, other devices such as posting a list of departments throughout the establishment, the selecting of a committee upon office administration and the making of charts of administration are employed.

The posting of a list of names that has been carefully chosen and prepared tends to secure an understanding of the duties pertaining to each department. If all the departments are numbered, as they should be, much time may be saved in sending orders and information from one to another.

Charts of organization make clear the divisions which exist between the different departments. They aid in keeping the members of one division from encroaching upon the domain of another.

The committee system will obviate many troubles arising from a misunderstanding of duties. This system, combined with the set rules for office procedure and the written statement of each clerk's duties and routine work, affords a means of instruction. The committee makes it a part of its work to educate the clerks for better positions and to receive suggestions from them concerning better practice. Firms using such methods make it a practice not to bring outside men to take vacancies. Outsiders are only taken on as juniors in subordinate places. The positions are filled by promotions in the regular staff.

If, however, there seems to be no man among the employés capable of meeting the requirements of the position it is better to go outside for the right man than to change the organization to fit the qualifications of some

person. In order to keep the office force in touch with the general policy of the management the committee may provide for a series of examinations to test the men's understanding of the organization. The employés will then have an opportunity to see the relation of parts from the point of view of the chief executive. Such tests furnish a good basis for judging the employés fitness for promotion.

In connection with the committee system there might be mentioned a committee composed of executive officers for the fixing of the office salaries. The advantage of this method is that it substitutes the experience of several men for one in deciding what shall be the monetary measure of each man's work. Injustice in fixing compensation will do more to disorganize an office force than anything else. This can often be avoided by referring all questions of salary to such a committee. Likewise the charge of favoritism so commonly made against the head of the department—and the staff is continually studying the foibles of the chief executive—is obviated.

108. *Office appliances.*—The office is pre-eminently the place for the originating of orders, the receiving of information and for the distribution and storing of the same. This makes the method of internal communication of great importance. In most offices much time is wasted by the running to and fro, from one desk to another, of the employés in search of information.

One firm has a carefully planned mail system and it illustrates what can be done in this direction in saving time. On the desk of every principal executive officer are three baskets, one for incoming mail, one for outgoing letters and one for the mail that is to go directly to the files. There is a messenger boy whose duty it is to

gather information and to distribute it. One of the prime requisites of this messenger service is that it shall be regular and frequent. Besides a gain in time there is the added gain due to the habits of concentration which are formed. The employé soon learns to depend upon the system and he is not taken from his regular work to run about the plant.

This system of communication is aided by a pneumatic tube service and by a system which makes it possible to gain access to the files, to the office library, and to the catalogues and other sources of information.

It cost a certain company \$20,000 to put in the system, but it was found that the service paid for itself the first year. The office force of this company consisted of 150 people and its factory employés numbered about 2,000 men. It was found upon investigation, before the new system was put in, that there were twenty-four places where letters were stored, and these were distributed over six floors of two buildings separated by a distance of 100 yards.

Modern office practice has developed many time and labor devices. Card systems and loose leaf systems in connection with the carbon copy have made it possible to do away with duplicate entries of the same information, and the modern voucher system has greatly reduced the labor of book-keeping and other recording devices for keeping information as to payments and so on.

109. *Standard forms.*—One of the most important things is the standardization of forms. This has reference to size, ruling, disposition of matter, the facts to be put on the forms and the quality of paper. The first consideration in designing a form is to decide what facts are to be represented there. The size of the paper

should depend upon the amount of information, and the arrangement should not be forced into an illogical form because of some preconceived idea as to size and shape regardless of the nature of the information. Neither should the quality of the paper be left to the printer. Current information can go on cheap paper while that meant for permanent records should go on the best quality. The question of uniform ruling is very important in the matter of saving time. A clerk can do fifty per cent more work upon forms that are standardized because he becomes familiar with the spacings and types.

Another feature of office method pertains to the selection of binders and card cabinets. Here again a standard type should be adopted which will apply throughout the establishment. This provides for the shifting of a cabinet from one department to another, and allows it to be used for another purpose should an occasion arise.

Many devices might be named that are used in offices to-day but most of them such as the addressograph, calculating, listing and billing machines are too familiar to need description. These mechanical devices are generally expensive, but in large offices they are almost indispensable and effect great saving.

110. *Reports.*—There are two kinds of reports, special or emergency reports and regular reports. It should, however, always be remembered in their compilation that nothing but information germane to the title of the report should be included, and that no reports should be made at all which have not some definite purpose.

A report implies a maker and a receiver. The latter generally represents someone in authority who is to use and pass judgment upon the information contained in

it. Therefore, the function and purpose of the man who receives the report should determine its character and contents. It is not necessary, for instance, to give the head of the selling department a report embodying the detailed costs of production of the articles he sells, nor is it necessary to give the superintendent or foreman a number of reports that pertain chiefly to the value of goods. Mr. James N. Gunn, one of the leading authorities upon office systems and practices, lays down the following rule: "To every man in the organization should be given only that information that his position determines he can use—not the information he may be curious about."

111. *Factors deciding who should make the reports.*—In determining who should compile a report the executive head who has the power to demand it should first investigate the opportunities which each person has of gaining the information which is desired at the office. Much useless data is forwarded to the head office by foremen and superintendents because they are requested to send in monthly or weekly reports without any consideration of their fitness to secure reliable facts.

112. *Contents of the reports.*—It is difficult to generalize, but two things should always appear when possible: (1) physical data, (2) financial data. Many schemes for gathering statistics for operating purposes fail because the reports contain financial data only. All of the costs, whether for labor, material or overhead expense are expressed in terms of value. Then too the report should contain facts that are comparable, and all should relate to a central fact. Each report should make a complete unit. The reports made to the general manager of a large company manufacturing twenty-five per cent of all the car wheels in the United States

shows that he receives each month the balance sheet, and loss and gain accounts, the costs of the various processes, not merely in terms of money, but in physical terms, showing the number of pounds of metal poured for every good car wheel, or for every hundred pounds of car wheels actually delivered to customers. In addition he gets special reports bearing upon some particular "diseases of car wheels." Other reports showed that he had a record of his men's efficiency as well as records of his machines and the plant.

The purpose and source of any report should decide the nature, the form and arrangement of its contents. As the conditions which govern the purpose and the sources vary in different businesses, it is impossible to describe any one system of reports which will be applicable to all enterprises. Nevertheless there are a few fundamental ideas which underlie the structure of the principal reports which are meant for the eye of the executive as an aid in the determination of his business policy. The two main purposes, therefore, from the point of view of the executive's business policy, will be the determination of the conditions under which the factory is producing and selling its goods. Before any manager can intelligently interpret the conditions as they are represented by actual operation, he must have some standard with which to compare these actual results. Such a standard may be gained by first determining what must be accomplished in the production and commercial ends of the business in order to net him a fair profit.

In arriving at a basis to be used as a standard of comparison in the process of production, the executive should have reliable methods for determining the character, volume and regularity of the output, the progress of inventions and new ideas which make for greater ef-

iciency and lessening of costs, and finally the cost of production. In determining a similar standard for the commercial or sales department, methods must be adopted for calculating the character of the market, that is, what profit must be obtained and what volume of business must be secured and what expense can be allowed in order to make the profit. This would involve considerations of each class of goods manufactured, their sales in each territory and the expense connected with the holding of supplies while they are being marketed. The function of reports, therefore, should not only aid the executive in arriving at the necessary information which gives him a firm grasp upon the technique of the business, but the compilation of the report itself, should help in the accomplishment of the results. This last function will be best promoted through some system in the collecting of data and the preparation of the report by which the men responsible for the direct supervision of the manufacturing and selling departments can be brought into intelligent and sympathetic coöperation with the policies and ambitions of the chief executive. Where the committee system has been employed as one of the essential features in factory organization, many reports which would otherwise involve much time and expense in their preparation can be quickly and easily made out by using the various committees as the source of the information. The reports under such conditions are always made up whenever possible by the committee handling the different branches of the product. "You may be sure," says Mr. Carpenter, president of the Hering, Hall, Marvin Safe Company, "that your committee, composed of enthusiastic men whose reputations are at stake, are going to see that these reports represent the very best that they in

the shop can accomplish, when they know that these will be closely scrutinized by the heads of the company."

There are four general kinds of reports—(1) those of the profit and loss, (2) those of the factory, (3) those of the sales department, and (4) the cost reports. Generally speaking these should be so arranged and timed that each will serve as a basis for comparison with the others. For example, the executive profit and loss report when compared with the selling department reports should prove a valuable index to business conditions, and when considered in connection with the data in the factory reports, a monthly balance sheet may be constructed.

113. *Executive report.*—The profit and loss report is of the greatest importance. Upon it are founded all others. It is produced monthly and its data comes directly from the firm's books.

The data in the report should be so arranged as to permit the ready comparison of those items which show the relative standing of the different branch houses of the firm. If the concern has branches in Chicago, New York, and also in some of the minor towns, these names might well head three separate columns under which would appear the result in dollars and cents of the month's activities pertaining to the various items of income and expense, cost and profit. The items should be classified and each classification should be given its total as well as itemized statement. Thus there should be spaces for "deliveries" (classified) and total "deliveries," for "factory costs," for "all other cost charges" (classified e. g. freight, storage, etc.) and total "all other costs." All these costs may now be considered as total "delivery costs." "Gross profit" will be next; and the two items of delivery—costs and gross profit—thus

standing together, are in the most favorable relation for comparison. Continuing down the column the next broad classification comes under "selling expense" (classified).

Salesmen, salaries and commissions.

(Dep'ts.)

(a)

(b)

(c)

Salesmen, expenses.

(Dep'ts.)

(a)

(b)

(c)

Managers, salaries

" expenses

Advertising

Total "selling expense"

The next general classification embraces:

"General expenses" (classified)

Office salaries

Rent, insurance, taxes

Postage, telephone, etc.

Stationery

Light, heat, power

Maintenance

Adjustments and losses

Attorney's fees

Miscellaneous

Total "general expense"

The total selling and general expense may also be given as embracing the last two related items of costs

and finally the last item in the column will be the "profit" or the "loss."

A careful analysis of the above report will show where the greatest profits in the business were made and where the losses occurred. Any change in the expense items from the normal can be readily detected, and to facilitate this, extra columns for percentages might easily be constructed.

114. *Report from the selling department.*—The purpose of this report is frequently and regularly to put the executive in possession of the chief business facts connected with the selling division. He needs these reports in order that he may push forward for more business or perhaps that he may the better direct the credit and collections. As a basis for judging the actual sales made and the actual expenses incurred there should be carefully worked out and included in each report the required sales necessary for the success of the business and the expenses that can be allowed. The "required sales" and "allowable expenses" should be calculated by a man thoroughly acquainted with the business and after a careful examination of the conditions under which the firm must work in each territory; the profit which the firm should make and the difficulties of getting business will then stand in a truer relation to each other.

The same standard form embracing the same data can be used in preparing the report upon the estimated sales and expenses as that employed for showing the actual sales and expenses. By so doing a comparison of the business "realized" with the "allowable amounts" is facilitated.

The items which will form the basis of the sales report will be as follows:

1. Each branch of the concern will be reported upon in regard to all items.
2. Percentage calculations for each item.
3. The volume of sales required or made (classified).
4. The factory costs allowed or incurred (classified).
5. Extra costs of every character, allowed or sustained (classified).
6. Gross profits, required or made.
7. Selling expenses, allowed or incurred.
 - (a) Classified—
 - (1) Salesmen, salaries.
 - (2) Salesmen, commissions.
 - (3) Salesmen, expenses.
 - (4) Managers, salaries.
 - (5) Managers, expenses.
 - (6) Advertising expenses.
8. Total selling expenses.
9. General expenses, allowed or incurred.
 - (a) Classified—
 - (1) Rent.
 - (2) Insurance.
 - (3) Taxes.
 - (4) Telegraph and telephone.
 - (5) Office salaries.
 - (6) Legal.
 - (7) Miscellaneous.
10. Total general expense.
11. Total all expense.
12. Net profit, required or made.

The advantage of the two reports to the executive for purposes of comparison, one showing the results desired and the other the actual accomplishment effected by the selling division, needs no commentary. There are, how-

ever, other advantages gained. The sales manager can see for himself without a special interview with the executive what must be done, and by comparison he observes with what success or failure his policies have been rewarded. These reports also furnish reliable information as to trade conditions and such knowledge is of prime importance to the chief executive in directing the general policy of the firm. Especially valuable are these reports to a firm which does a business involving long time contracts under which deliveries are made long after the sales are recorded.

115. *Factory reports*.—Reports from the factory may be as numerous and as varied as the desires and fancies of the executive may impel the factory managers or committees to prepare. We will, therefore, confine ourselves to the description of such reports as fit in logically with the reports selected from the other departments. A report, for instance, that throws light upon the executive's profit and loss report, showing the source of certain gains or losses, is very desirable. The production and efficiency report is such and may be made a valuable guide in determining the efficiency of the factory as a whole or of any department in the factory. This report should be so constructed that the results for various periods may be compared with each other, either as a total or an average. In order to establish a normal or standard result the averages of a preceding period of, say, six months may be taken. With these averages the present weekly or monthly results may be compared.

The data which should be entered upon the efficiency report will be as follows:

1. Date, week or month ending.
2. Number of employés.

3. Output.
 - (a) Number of machines.
 - (b) Value.
4. Hours worked.
 - (a) Total.
 - (b) Overtime.
5. Payroll.
 - (a) Piece work.
 - (b) Day work.
 - (c) Percentage of jobs reaching standard time.
6. Material purchased.
 - (a) Directly.
 - (b) Indirectly.
7. Inventory (classified).
8. Miscellaneous charges (classified).
9. Factory balances (classified).
10. Costs.
 - (a) Material.
 - (b) Labor (classified).
 - (c) General wages.
 - (d) Total.
11. Increases or decreases.
 - (a) Where?
 - (b) Why?

By comparing the results as recorded in the above outline with previous reports of the same kind, the present efficiency of the factory or any department may be easily calculated. This comparison of present costs and values with previous costs and values shows where each gain or loss has been sustained, while a comparison confined to items within the single report, although it may show a total gain or loss, would not disclose the particular cases. For example, we may compare the figures representing the number of employes, payrolls and ma-

terial purchases with the value of the output and the inventories. Such a comparison would not show whether the gain, if there were a gain, is due to greater efficiency in the production or purchasing department. With this report before him, the executive is put into possession of a knowledge of the relative strength of the concern as a competitor for business. That is, he will know his profit as a producer, and with this as a basis he can gauge his strength in the commercial field. Normally, there should be a considerable margin between the cost of the finished product and its market value. Thus as the product leaves the production end of the business and enters the commercial field the manager by the simple process of subtracting the cost of production from his estimated selling price, can allow for the expenses necessary to sell without depriving himself of his profit.

116. "*Progress report.*"—Another report from the factory is the "progress report." This comes to the manufacturer weekly, and if the concern is one which handles considerable contract work such information denoting progress, becomes of great importance. Given the conditions under which the product is advancing toward completion the manager can put pressure at the right spot at the right time and so avoid threatened delays and tardy deliveries. There is no support which the factory can give the selling department that is more important and more appreciated by the latter than the setting of delivery dates which can be met. Some firms in pushing a new product take orders ahead. But the ability to meet delivery dates should be first carefully considered.

The following form embodying the items contained in the report is given as a model: ¹

¹ Taken from "Profit-Making Management," by C. U. Carpenter, page 142.

FACTORY "PROGRESS REPORT"—WEEKLY.

Date

Condition of Orders (classified).		General.
Name and Location of Customer.	Description of Order (briefly).	
	Factory Order No.	<div> <div> In these columns place the different classifications of each contract, showing % finished. </div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> </div>
	Date of Order.	
	Must Erect by.	
	Must Ship by	
	What is shipped.	
	Drawings % done.	<div> <div> Signed — Committee. (by Sec'y). </div> </div>
	Material % received.	

"Such reports," says Mr. Carpenter, "covering a very wide variety of work, have for a long time been made out by our factories on Saturday morning, arriving on my desk the following Monday. Meetings with interested heads of financial and sales divisions immediately follow, and as a result the closest possible touch between the several divisions upon the one important point—Production."

117. *Cost reports.*—These reports are treated in full in AUDITING AND COST ACCOUNTS, but as a part in the general system of organization their importance should not be overlooked. Not all manufacturers are willing to go to the expense of gathering accurate cost and stock data, yet all recognize the aid which fully analyzed cost figures would give them in checking up the various departments. Says one successful business man, "Let one of the higher officers bring into a committee meeting, or a general foremen's meeting, a set of fully analyzed cost returns upon some particular line of the product, and begin to inquire of the different foremen present why their share of the expense amounts to 'so large an amount,' and there will usually follow a heated discussion that will throw many a valuable side light upon the cost of production."

118. *Period covered by a report.*—Two things must determine this: (1) the kind of organization, and (2) the sort of men in the organization. The operating reports are generally made weekly i. e., the payroll period. A statement such as the profit and loss account usually appears semi-annually or annually although many concerns favor a monthly report.

119. *What should be done with reports.*—It should always be kept in mind that a report is for business and not for historical purposes. "A good test," says Mr.

Gunn, "of the usefulness of any report is to see, after that report is placed in the hands of the proper executive, whether anything happens as the result of action he may take based upon the information contained in the report." If the concern has adopted the committee system there is no point in the organization where the benefits of such a method will be better displayed than when it is brought into use in a discussion of the various reports. The reports having been made out and forwarded to the executive, the makers of them are naturally anxious to see what the outcome will be. Any suspicion that a report may be put aside and forgotten breeds a spirit of indifference that will invalidate the correctness of every succeeding one. But if the understanding is general that the heads of departments are to be called into conference upon important reports, each person concerned with the report will do his best to make a good appearance. In considering any of the executive reports mentioned above the committee might consist of the president, the treasurer or accountant, the general manager, the factory superintendent and the sales manager, together with such heads of departments as may be immediately concerned with the results of the discussion.

Such a committee meeting should proceed under due forms and according to some definite program. The president acts as chairman and the various reports are considered in order of their importance. Generally this will be in accordance with the ranking importance of the officers. Accordingly the general manager presents a critical estimate of the general business situation of the firm. This may involve the sales manager, provided there is a general falling off in some direction, and he will be called upon to explain. If the conditions are

beyond his control, such as some new form of competition, it rests with the committee to suggest the best means for meeting it. Each item of the report is taken up and discussed likewise. The executive report is followed by the reports of the sales manager. He may suggest an improvement in the product as demanded by the trade or some feature of the expense items may need to be defended. The same general discussion follows this report as it does all others.

The factory superintendent must in his turn stand sponsor for the reports pertaining to output and efficiency, progress of work and improved methods and inventions.

If the treasurer heads the general financial as well as the accounting department he will be expected to deal with matters pertaining to credits and collections—especially where those matters are influenced by the rate or date of delivery as stated in the “progress of work report.”

This immediate and definite action upon the reports is supplemented in its effect by the publicity given to every item, and if human nature can be counted on to slight these reports where no notice or tardy notice is taken of them, it can be likewise depended upon to put forth its highest efforts when due credit and importance is shown to be attached to them.

CHAPTER XII

STANDARDIZATION AND WAGES

120. *Goal of every producer.*—One of the chief differences between machine-made and hand-made goods is that the latter possess greater individuality. The recent revival of the handicraft trade shows what a strong hold this quality in a ware has upon the consumer. Nevertheless, when the producer of a hand-made article finds that competition is threatening his market he begins the standardization of his product. He may first establish a definite brand for his article, by which method he hopes to impress a community with the fact that his goods possess a standard of purity or some other quality which is highly desired in the market. Failing to monopolize the trade by this method, he may attempt to hold his market by a reduction in the cost of making his goods. If his goods are made altogether by hand, the costs will be lessened by turning out a larger product than before in a given period of time. This he can do with the best results if he can make a standard type and can confine himself to the making of it over and over again. This is standardization, but it cannot be carried very far under a system of handicraft labor, for the working power of a man is limited. But with the addition of steam power and machinery to the workman's shop, the question of being tired does not apply to either the engine or the tools. The more work these can be made to do, the higher will be the productive capacity of the shop. But before he can determine what

the highest efficiency of a shop is, he not only must know his own endurance and skill, but must determine what the possibilities of his machine are under the best conditions.

121. *Three factors conditioning output.*—The three principal factors conditioning the output of both man and machine are speed, the character of the material, and the tools. It is therefore necessary to determine what particular speed, what particular grade of material, what particular quality, what particular kind of tool can all be united in producing the greatest amount of goods of a given quality during any production period. When this has been determined for each of the factors, we have what is known as standard speed, standard materials, and standard tools. As the size of the industry increases and the number of men and machines grows, it becomes necessary to apply the principle of standardization¹ to other processes, equipment and appliances. Thus we find standard times for handling the work standard times for assembling, standard office forms and finally a standard wage, which rests upon a consideration of the relations of all those processes which have been standardized to the labor which is necessary to direct them.

The standardizing of a product, a tool, or of a process or of a relation depends upon the removal of as many as possible of the variable or uncertain factors. What may be a standard under one set of productive conditions may be entirely set aside under another because some uncertainty connected with the old standard has

¹ In the Santa Fé system of transportation, referring only to the various shops, roundhouses, etc., there are 23,000 operations recognized as standard, with additions being made every year.

been removed. The measure therefore that is used in a factory in determining its productive efficiency, or the efficiency of any part of the productive process, is the lowest possible time in which each piece of work can be completed. This is known as the standard time. A standard time, however, is simply the reduction to its lowest terms of a product which is made up of a number of other predetermined standards. Thus the "standard times" for any shop depends upon the following:

1. "The character and limitations of the existing machine tools.

2. "The introduction and use of high-speed steel for cutting tools.

This will include:—

- a. "The determination of the proper shapes for tools.
 - b. "The provision for proper treatment of steel of this character in forging, hardening and grinding.
 - c. "The determination of the best working conditions possible, such as coaling agent, etc.
3. "The securing of the maximum possibilities in cutting speeds.

This includes:—

- a. "The careful consideration of the tests already made and submitted by different investigators, giving of course due thought to the conditions existing at the time of the test.
- b. "The adaptation of these records to existing shop conditions and the making of a thorough test in the local shop under the limitations imposed by types of machine tools existing in the shop.

4. "The collection of all production data upon a systematic plan and their arrangement so that they can be used.

- a. "The instruction of the foremen and the workmen as to the results to be expected and how to secure them.
- b. "The insurance that the every day production follows this standard of efficiency."¹

122. *Determination of handling time.*—Many of the standards pertaining to materials, machines, and speeds belong for their determination within the province of the engineer. As an illustration of how far standardization has gone as a matter of business policy, the adoption of standard times for handling the work and for assembling the parts presents the most recent development. Handling the work is divided into four parts and a standard time determined for each division. These are the times required to handle the parts, to "set up" the job, to machine the work and to remove the work. Only one of these will be illustrated and this for the purpose of showing what commonplace and simple activities are receiving the closest scrutiny of the progressive manager.

The time required to handle the parts in any large factory is an important consideration. The loss of much time may result from the lack of proper facilities, and methods, and from a tendency of workmen to kill time. The proper facilities to-day for the handling of heavy goods especially would be pneumatic or electric hoists connected with an overhead single track which serves a number of machines. The method of handling work has been standardized by having certain operations, such as the piling or placing of parts, done in the

¹ "Profit-Making Management," by C. U. Carpenter, page 83.

same manner and place each time the operation is performed.

In the handling of light work there are various operations that should be given close attention; for example, it is best for the stock to be carried in boxes of the standard size. This reduces the number of sizes needed to the minimum.

A check upon the workman may be effected by carefully selecting the place where the box is to stand. Very often a low, strong table can be used to good advantage. This table at once standardizes the spot where the stock shall be placed, and the fact that the workman becomes accustomed to reach for his stock always in the same spot adds appreciably to the speed of the handling. The conditions are now ready for a test to be made in order to determine the least time necessary to do the work. A series of stop watch tests upon an active workman will serve as a basis for a standard time for handling this part of the work. It is well, however, to check this test by other trials performed by an expert "tester." The latter is really a standardized laborer.

The establishment of a standard time for assembling work has practical difficulties connected with it which are far more difficult to overcome than in the case of machine standards. The human elements of judgment and skill are more difficult to determine than the peculiarities of a machine. In most factories the workmen dislike to have their best speed known to the management, for it often means a relative decrease of pay. The only general rule that can be applied in the determination of the standard times in this work is to separate the assembling operations for any particular job into as small a number as possible. If a workman can be confined to three or less operations the problem is

much simplified. But where the assembler has as many as ten different operations on a particular part, the solution becomes highly involved. The character of the difficulties put in the way of the determination of this standard time indicates that the manager should lend his energies to solve it. "The waste of time," says Mr. C. U. Carpenter, in his excellent book on "Profit Making Management," "in the ordinary assembling department of the average manufacturing concern is almost beyond belief."

A test made by Mr. Carpenter on assembling work shows what can be done in effecting economy in this direction. Taking advantage of a strike in the polishing department, a system of determining the standard times of assembling was adopted with the new men. Twelve expert polishers were put in charge of instructing sixty-two green hands. A partial analysis of the work after a few weeks showed that a reduction of 40 per cent could easily be made in the rate paid and still provide the men with a good wage. In three weeks time it was found possible to put the entire force upon piece work at the reduced rate. Being assured that no further reduction would take place the men were urged to do their best. The records showed that at the end of a period of ten weeks, the average earnings exceeded \$5.50 per day whereas under the old system it was only \$3.00 per day. The work itself increased so materially that at the end of six months the actual records showed savings in the pay roll in this department amounting to over \$55,000 per year.

The relation of standard times to other features of organization is very close and vital. The determination of the "shortest time" in which a job can be done is the first place to begin in establishing a wage system; and

what standard times mean to the cost system has only to be mentioned, to be realized.

123. *Principal elements in getting efficiency.*—The methods by which greater efficiency is gained are sometimes called “betterment work.” The principal elements that have been treated of so far in previous chapters are: (1) the centralization of manufacture at shops best fitted by reason of location or otherwise for doing the work; (2) standardization of parts, of tools and of operations; (3) supervision of materials, tools, and methods and the planning and designing of devices and tools to help labor and machines in reducing delays. There still remains a fourth element for consideration—the element which relates to the reduction of labor costs by the application of a system of wage payments.

124. *Wage systems*—In determining the standard time of any process involving the combined work of machines and men, the many difficulties that arise are largely due to the “human element.” Some of these difficulties have been mentioned and among them is the difference in men’s capacity to work. Therefore, before a standard time can be adopted for a particular operation, it must first be determined what the capacity of the average man is. If the standard time is based upon what the best man can do, and the average laborer is expected to reach that standard, the practical failure of any wage system based upon it is assured.

Standards are of little use unless they can be used as measures in comparisons. A standard used in a system of wages must be used in effecting two comparisons. First, the working efficiency of each laborer at different times must be compared; second, the working power of different laborers must be compared. By a consideration of these two comparisons, the manager is en-

abled to determine what the individual laborer is capable of doing from day to day and what he ought to do as compared with the other laborers who do the same grade of work. Having determined what efficiency is necessary to produce his goods at a certain cost in order to make the required profits, the necessity devolves upon the manager of keeping the rate of production up to the required standard. It is at this point that the question arises as to how the laborers may be held to the standard efficiency. The machine asks only as its return the repairs and renewals necessary to keep it going. The laborer, on the other hand, seeks as his return all that he produces. The nearer he thinks he is approaching to this demand, the greater is the stimulation to work. It is therefore not always the high wages that determine the labor efficiency of a factory but the system by which the wages are determined and paid.

125. *Systems of pay.*—The most prominent systems of pay in the United States are the day-work plan, the piece work plan, the premium plan, the differential plan, and the bonus plan.

The first method is usually employed where special conditions prevail. Thus it would be fatal to adopt a system of wages in a department where great care and accuracy were demanded whereby the workmen were stimulated to produce more but inferior work.

The piece work system in its simplest form provides for the payment of work by the piece. It was at first hailed with enthusiasm by the worker, but so many abuses crept into the system which proved hurtful to the piece-worker, that it is now generally regarded by working men with suspicion. One of the abuses is the practice of cutting rates when the men begin to earn high wages. The mischief of cutting rates is very largely

caused by poor judgment in establishing the piece-rate in the first place. The standard prices or the standard times were not based upon scientifically determined data, but upon some such basis as the "best previous records," an "ordinary try-out," or the foreman's estimate. The laborer generally saw that by working harder he could increase his income by several per cent over the old rate, but this generally led to a similar per cent cut in the price. Thus the laborer was left working very much harder than a few days before with a return in wages no larger than formerly.

With the day work plan and the piece work systems as a basis other methods have been made possible by the more accurate determination of standard times. The bonus system is one in which there is a definite time set for the accomplishing of a task and which provides for the payment of an extra sum of money if the work is completed within this time. This is a modification of the day-work plan, whereby a definite task has been more scientifically determined in regard to the time necessary to accomplish it. The principle involved in this system as in the other is to establish a fixed rate of pay per day so that if the laborer turns out less work than is demanded by this standard he will be insured at least of a living wage. On the other hand, if he comes up to the standard set or does more, he will be paid a proportionately larger wage. The Halsey System, named after its inventor, is an example of a wage system formulated along these lines.

A standard time is set for accomplishing the work, but if for some cause beyond the control of the workman that piece of work cannot be done in the time set, the laborer gets the wage previously agreed upon. It is also understood that this rate of wages will not be

cut. Supposing that the man was working on a six-hour day basis, he would be expected to finish in six hours and would be paid 25 cents an hour or \$1.50 per day. If he did the work in five hours he would get a part of the wages which he had saved by finishing an hour sooner. If the proportion agreed upon is one-half he would then get \$1.37½ for the five hours' work—namely, five hours' work at 25 cents plus 12½ cents for the hour he saved. If he does the work in three hours he would get three times 25 cents plus one-half of the wages for the time saved or \$1.12½.

Under this system, therefore, the laborer never fell below the day rate that was fixed and he always had the chance of earning more by turning out more work. This was a compromise between the day work and piece work system which lessened the effects of each. The employer received part of the benefit of the employé's increased output, thus eliminating the incentive to cut the laborer's wages. On the other hand, the workman would not be inclined to limit his output because he wished to do as little work as possible, as under the day-work plan, or for fear that his wages would be cut, which so frequently happens under the piece-work plan.

126. *Taylor differential system.*—Another system is that known as the Taylor differential piece-rate system, after its inventor. This is based on a carefully determined standard time, a careful study having been made of the operations involved and estimates of how long it would take a first-class man to accomplish a given piece of work. If that standard is reached, the workman receives a high rate of wages. If he just fall short of the standard set, a considerable deduction from the day rate is made. This system is only an-

other of the special plans made to suit particular conditions. It could only be introduced into high grade shops where the work is standardized and the men trained by functional foremen. It might be applied where the intensity or the rate of production must be high in order to get the utmost out of the very costly machinery, tools, and so on.

127. *Efficiency system*.—The efficiency system is still another of these plans. Here the time limit is set as in the Taylor system, and if it is reached by the workman he receives a high bonus; that is, the employés are paid by day wages but are stimulated by an additional bonus proportioned to their efficiency—efficiency in this sense being the ratio between the time he takes for the job and the standard or schedule time set for him. The amount of the bonus is determined by a standard table which fixes the percentages of wages for time actually worked that is paid in addition as bonus at any determined rate of efficiency. As applied in the Santa Fé shops this table grants no bonus below 66 2-3 per cent efficiency—that is, below the rate of working at which the man takes one and one-half the standard time for completing his job; from that point upward it allows bonus on a rising scale, which reaches 20 per cent additional to actual wages at 100 per cent efficiency (or the completion of the job in the standard time), and thereafter adds 1 per cent of wages for each additional 1 per cent of efficiency.

Thus it is seen that this system does not punish a man for not reaching a standard and omits the failing of the Taylor system by enabling the men to earn a fair wage if unforeseen difficulties occur. For instance, if a man reaches 100 per cent efficiency, he will receive a

20 per cent bonus; if he falls below or goes above this standard, he will receive less or more according to the following table:

<i>Efficiency.</i>	<i>Percentage of Additional pay.</i>
67%	0
74%	1
80%	3.37
85%	6.17
90%	9.91
95%	14.53
100%	20
110%	30
120%	40

The rate of pay would be as follows:—

<i>Hours' work</i>	<i>Days' work.</i>		<i>Piece-work.</i>		<i>Premium.</i>	
	Daily Wages	Hourly Rate	Daily Wages	Hourly Rate	Daily Wages	Hourly Rate
7	\$1.75	.25	\$1.50	.214	\$1.75	.25
6	1.50	.25	1.50	.25	1.50	.25
5	1.25	.25	1.50	.30	1.375	.275
4	1.00	.25	1.50	.375	1.25	.312
3	.75	.25	1.50	.50	1.125	.37
2	.50	.25	1.50	.75	1.00	.50
1	.25	.25	1.50	1.50	.875	.875

In order to make a further comparison of the various systems, we will assume that the following conditions might occur:

1. The workman does no work at all,
2. The workman does the standard work within the standard time,
3. The workman does all the work in no time at all.

Then under the various systems we have mentioned their pay would be as follows:

	No. 1.	No. 2.	No. 3.
Day-Rate,	Full wages,	Full wages,	No wages.
Piece-Rate,	No wages,	Normal pay,	Full pay.
Premium,	Full wages,	Full wages,	50% additional pay.
Taylor,	No pay,	Bonus above normal pay,	Full bonus and full pay.
Efficiency,	Full wages,	Bonus above normal pay,	Full bonus and full pay.

128. *Bonus plan.*—The bonus plan of payment, when combined with methods that determine accurately the shortest time in which a job can be finished, has much to recommend it. In the first place, it is easily understood and can therefore be easily introduced among a body of laborers. It is easily adapted in some form to almost any other system of pay that may be already in existence in the shop. Some managers have found it advisable to extend the bonus plan so as to include the job bosses and the foremen. The plan in this case is to give bonuses to the foremen in case all the men under them earn bonuses. This has the advantage of stimulating the foreman to give immediate and close attention to the inefficient workman. He will either attempt by proper and speedy training to raise his efficiency or drop him from the pay roll.

Thus from the point of view of labor the great purpose of standardizing both as to operations and time is to introduce some system of wages whereby efficiency is increased and stimulated under some method of bonus awards.

Perhaps the greatest discovery which the modern manager has made in his studies and attempts to solve his labor problems through better wage systems is the fact that the efficiency of the whole organization is the efficiency of the individual workman and that the latter is secured and stimulated by giving him a wage proportioned to his production.

CHAPTER XIII

INDUSTRIAL BETTERMENT OR WELFARE INSTITUTIONS

129. *Beginnings of industrial betterment.*—Since the first factory act was passed in England in 1802 at the time when the interests of masters and workmen were more closely allied because of the small workshops and old methods of work, remarkable improvements have been made in the whole civilized world pertaining to the health and comfort of the workers in all branches of industry. By that act only the barest precautions were to be taken, such as the limewashing of the workrooms in a factory twice a year and their “due ventilation.” Hours of work were to be reduced to twelve a day. There was no limit to the age of workers, and children of 6 were allowed to work with their elders at the same machinery. The act applied principally to apprentices of cotton and woolen factories. Provisions were made for their learning to read and write, and they were obliged to go to church once a month.

Then came the first parliamentary inquiry in 1816, and medical men saw that it was absolutely impossible for the workers to retain their health under the conditions in the new factories. The inhaling of dust and fibre, the continual presence of filthy floors and constant expectoration, the lack of sufficient light and fresh air, as well as oppressively long hours, were common to all the factories. In the first half of the Nineteenth Century the figure of the “woman in unwomanly rags plying her needle and thread in poverty, hunger and

dirt," as depicted in Hood's "Song of the Shirt," was deplorably common. But with factory legislation, trade unions, and industrial betterment undertaken by employers, conditions have changed in Europe and America, until now we have such model factories as the Cadbury Chocolate works near Birmingham, England, where things are ideally healthful inside, and the employés are given an opportunity to live in a model village in model houses situated in little gardens amid attractive shrubbery and flowers.

130. "*Welfare institutions.*"—About twenty-five years ago a number of manufacturing concerns in Germany, which were subsidized by the government, introduced improvements in the methods of light, heating and sanitation in their workrooms, as well as rest rooms, emergency hospitals and lunch rooms for their employés. Houses at a low rental, recreation places, lectures, and industrial insurance were also included. These were considered entirely from the view point of individual betterment and were therefore called *Wohlfahrts-Einrichtungen*, or "welfare institutions."

By experience it has been found, in America as well as in Europe, that the promotion of the physical, mental, and moral welfare of the employés is actually a matter of profit to the employer. If healthy, intelligent, comfortable and happy workers do better and more work than those who are ill-nourished, unintelligent, miserable and ill at ease, there is no question but that it pays to have the former. If the workman is regarded and treated as an automaton, bad work, ill-will, disagreements, strikes and labor troubles result. If he is regarded and treated as a fellow worker by the employer, he is far more apt to conduct himself as such, and by interest in his master's work there results im-

provement in workmanship, greater celerity, and a consequent increase of production.

Undoubtedly one of the chief causes of the trouble and turmoil in the industrial world to-day is the loss of touch between employer and employé. In the United States, the National Civic Federation and the American Institute for Social Service of New York City are making efforts to bring about harmony and sympathy between employer and employé by establishing industrial betterment branches about the country, and by publications, lecture tours and meetings.

In 1889 was begun the appointment of social secretaries by large concerns who proved of untold advantage to the houses who employed them. They are sometimes called "welfare managers." Often they are women of ability, preferably university graduates. Their duties include the engagement of unskilled labor, the supervisions of lunch arrangements, hours and terms of employment, the visiting of employés who are absent for illness or other causes, the overseeing of clubs, societies and social doings and things of a similar nature. When these welfare institutions are properly organized and managed they do not require any more attention than a lack of them.

131. *Safety devices against accidents and fire.*—In a consideration of welfare institutions or industrial betterment, we must include the provision of safety devices against accidents and fire. There is no question but that if the employés' peace of mind is assured and if there is no perpetual nuisance or danger staring him in the face, he can devote his attention and energy more strictly to his work. In factories it is very necessary that proper screening and belting around the machines be provided. It is becoming more and more common to

introduce automatic devices for protecting the workers even if they be careless or incautious. Dangerous parts of machinery are shielded and painted so as to attract attention. Frequent boiler inspection is averting many accidents. In the long run precautions of this kind save money for the employer by avoiding claims for accidents.

The law requires that factories be built fireproof, but at present not all of them are fireproof. Even fire escapes are not of much use in case of a panic, any more than a fireproof building is if the inmates have all lost their heads in case of a sudden alarm. The only way to avert a panic is to have occasional fire drills. There are generally more casualties as a result of panic during a fire than from the fire itself, and often there is a panic from an alarm when no fire exists. In most places there are fire buckets or sprinkler systems. Still if no one knows how to use them in emergency they are not of much consequence. Automatic sprinklers would be of no use if there were not plenty of water at hand. For this reason they should frequently be looked after. A regular fire corps should be appointed from among the workers and drilled occasionally. Fire escapes too are often the cause of casualties. The lowest fire escape balcony generally has its ladder hung up so as to prevent the possibility of thieves and burglars entering the building. If the ladder is long and heavy, it is difficult to handle especially under the stress of excitement. Consequently there is a jam and much crowding on the stairs of the escape. By fire-drills, the employés may be instructed how to act—how to get to the escapes in an orderly way as quickly as possible, and then how to descend properly without crowding. Drills have been introduced in many factories with remarkably good re-

sults. After several of these, there is no danger of a panic. A building with hundreds of workers may thus be emptied in a very few minutes and all loss of life and even minor accidents averted. Drills pay in the long run, as in case of a real fire, the firemen may devote their energies to the saving of property. Then too, the peace of mind of the workers is assured as they know that everything will run smoothly in case of alarm.

The most progressive firms now-a-days provide rest rooms and emergency hospitals in their buildings. Often a worker may be indisposed for several hours but by a short rest and a little care he may be able to go on with his work instead of going home and missing a whole day. Some of the rest rooms are provided with beds, couches, and bath rooms adjoining. Some firms even supply a nurse. Occasionally there is a doctor in daily attendance whose services are free. The nurses also visit invalid employés at their homes, and sometimes fruit and other things are provided by the company. Other firms keep a dentist on hand. The Diamond Match Company has a dentist and a doctor who watch the workers for symptoms of phosphorus poisoning.

132. Light.—The ideal modern factory or business house is situated in the suburbs of the great cities where fresh air, plenty of light and pleasant surroundings are to be procured at little cost. For example, the Cadbury Works are situated five miles from Birmingham amid beautiful gardens. The Waltham Watch works near Boston overlook the river and a well-treed village. The buildings of the National Cash Register Company at Dayton, Ohio, are surrounded by gardens. The Natural Food Company has magnificent buildings which stand in a park.

The smoke nuisance is gradually being done away

with. An understanding of a few chemical facts regarding the nature of smoke disposes of the obnoxious particles, and the entrusting of its control to a chemist not only disposes of the evil but saves fuel as well.

The obvious advantage of plenty of sunlight in workrooms leads to the use of much window space. Sometimes prismatic glass is used which throws the light directly into the center of the rooms. The office building of the Armour Company has 800 windows. The ceilings are fifteen and a half feet high. Each floor has 140,000 square feet of space. The windows are in sets of three at intervals of six feet. There are 1,500 electric glower lamps nine feet apart and besides four ninety-candle power lamps at intervals on each floor. The lamps are twelve feet above the desks. Electric light is superior to gas and other artificial lights because there is little danger from fire and no pollution of the air. Then too, it does not affect the temperature and humidity of the atmosphere. Most of the large progressive firms now employ this method of lighting. Next in preference come the Welsbach burner and acetylene gas.

133. *Ventilation.*—Equal in importance to light is proper ventilation. One of the chief dangers of indoor life is the exposure to vitiated air. It is generally known now-a-days that the fresher the currents of outside air and the more directly they enter into the rooms the more beneficial are they to the individual. Bad air causes weariness, dullness and torpor. It stands to reason that an employé will not accomplish as much in this condition as when he is kept fresh and bright by good ventilation. Proper heating and cooling in the respective seasons are well worth the expense.

In the most important modern factories exhaust fans

are employed to draw off odors, steam, dust and dangerous gases. The National Cash Register Company's brass foundry is so arranged that the fumes from the furnaces can be collected and carried away at the roof. In one establishment in a Massachusetts foundry, a large flaring hood in the center of the room draws off the dust by upward suction draft, and the operatives wear helmets of fine wire inserts to protect the eyes while cloths under the helmets protect the nose and mouth. In the Parke-Davis Drug Works at Detroit the hall doors are hermetically sealed to prevent the dust of the hallways from entering the workrooms. The air is kept filtered and fresh and then drawn out so that the dust is kept from the workers as well as from the medicines and drugs. The office building of the Armour Company has tile ducts in the walls which carry fresh air through registers in the walls near the ceiling and the foul air is led away near the floor. Fresh filtered air is pumped in by a fan driven by a powerful motor in the basement. It is known that particles of iron and stone dust induce diseases of the respiratory passages, and that workers in lead, mercury, arsenic, phosphorus and dyes suffer from injurious effects.

134. *Sanitation.*—In connection with light and ventilation comes the consideration of cleanliness and sanitation. Realizing that next in importance to clean workrooms is the cleanliness of the individual, employers have provided facilities for this. Especially when foods and fine light colored materials and articles are handled it is imperative that the workers be absolutely clean. In many occupations a change of clothes proper for the work is insisted upon, and lockers as well as washing and bathing facilities are provided by all enterprising employers free of charge. The same thing

is necessary when workers are employed in dirty work.

The McCormick Harvester Works provide each machine shop with rows of marble basins for hot and cold water and soap and towels. The Cleveland Twist Drill Company provides shower baths. In the works of the Pope Bicycle Manufacturing Company at Hartford, Connecticut, warm water flows in a trough past the individual lockers. Each of these has also a cold water tap. At the Cadbury Works in England swimming baths are provided. The Natural Food Company has fourteen rooms with baths and the employés are allowed to use them in the firm's time; hot water, soap, and towels being provided free of charge. In Germany at the Krupp mines near Hanover 1100 miners are allowed to use the twenty-eight shower baths free of charge daily. The Spindlers near Berlin have free bath houses on the river with swimming instructors for their 1000 employés, while there is a small charge for hot, shower, steam or hot air baths.

135. *Rest hours and lunch rooms.*—Realizing the importance of proper and cheerful methods of eating as well as the absolute necessity of hygienic food, employers have established lunch rooms where healthful lunches may be bought at a low figure. More has been done in Europe along these lines than in the United States yet great progress has been made here too. Americans are still held up to ridicule for their patronage of "quick lunches," and dyspepsia continues to be the national disease. The picture of the shop girl or factory hand rushing out at noon to lunch upon ice cream soda, probably adulterated, or a cup of strong coffee and the proverbial piece of pie, is still laughed at by Europeans. Nevertheless this is becoming rarer under the newer facilities offered by employers.

In France there is a law which insists on dining quarters in connection with factories. In many of the large concerns a good lunch may be had for from 2 to 15 cents. The Krupps in Germany have dining-halls which are provided with ranges so that food brought from home may be properly heated. Milk, coffee, and rolls are to be bought at cost both morning and evening. Another big firm in Germany provides the same kind of a dinner that is given to the German soldier—six ounces of beef, a quart of soup and vegetables for 5 cents. Plain coffee is to be had at less than a cent a pint. Another dining-hall is provided for those workers whose families bring in their meals and who are allowed to eat with them.

In the United States the Natural Food Company gives free lunches to 350 girls. One hundred and fifty men can buy dinner for 10 cents at a lunch counter belonging to the company. Wanamaker's provide good meals at 10 cents for the employes at their stores. The Chicago Telephone Company gives a free lunch of tea or coffee with cold meat and fruit and other things with a frequent change of menu. The United States Playing Card Company of Cincinnati can seat 1230 in its dining-hall. The menu is posted outside the dining-hall door each day and the employes can make a selection in passing. They leave work in four batches. Each takes his plate from a rack and gets it filled on the way to his seat. At some of the mines in Colorado there is a bar where men may procure soft drinks and unadulterated alcoholic drinks of the best quality. This is to protect them from injurious and poisonous drinks, for it is a well-known fact that miners are much addicted to drinking. Many companies too provide plenty of pure spring or filtered water so that at least

while their employés are at work no risk from bad water is incurred.

136. Recreation.—The primary consideration in the matter of recreation is of course the adoption of an eight hour day, which many progressive firms have seen fit to do. Next is sufficient time for lunch and then perhaps one or two intervals of rest for a short period each day. We all realize that “all work and no play makes Jack a dull boy.” Just as much and even more work is accomplished in shorter hours. Faculties which are dulled by fatigue, weary muscles, and a mind fagged out are not conducive to good nor rapid work.

Many firms allow a few minutes of rest during the afternoon, realizing that their employés are under stress and tension which is greatly relieved by a short change, and that they really work faster as a result. Cheerful surroundings, good air, and light all have a recreative effect. Music is encouraging and restful and relieves the strain on the nerves. Some companies make it a practice to have music played on a piano sometimes accompanied by a song during work hours. No one doubts the enlivening effect of the band upon soldiers on the march. Why not have music in the march of industry? In some factories, the operatives sing to the piano during work.

Many concerns provide outside amusements which may be indulged in during the noon recess. The girls of the Cadbury Works are allowed to go out upon the magnificent twelve-acre grounds, where there are tennis courts, cricket pitches and shady walks. The wish of the woman of the “Song of the Shirt,” who longed “but to breathe the breath of the cowslip and primrose sweet,” has indeed been realized in these days by her more fortunate sisters, who, in a figurative way, ply their needles

and thread industriously, but who can relieve the monotony by the sight of the sky above their heads and the grass beneath their feet. In wet weather the Cadbury girls go to the gymnasium where there are two instructresses who are employed by the firm. The men have several acres of ground with a pavilion and gymnasium, as well as cricket and football fields and a fishing pool. Mr. Carnegie at Pittsburg has a public library, a concert hall and organ, and also a swimming bath, a gymnasium and bowling alleys. A low fee is charged for their use.

Vacations with full or part pay are profitable to both worker and employer. In Europe, the Saturday half holiday is very common, but this is rare in the United States. Most big American concerns, however, give summer vacations of one or two weeks and an occasional outing or picnic for a half day. The Siegel-Cooper Company of New York gives its 2000 women employées a chance to spend two weeks at their seaside home every summer.

137. Educational facilities.—There is no question but that the success of the largest concerns is due largely to the efficient working force. Intelligence plays a most important part in efficiency, and consequently facilities must be offered for the education and improvement of the individual workers. Fully one-third of the children of the United States leave school before the end of the elementary course. This is also the situation in Europe, and European nations have realized it and have supplied "continuation schools," whereby employées may attend evening classes for elementary, secondary, or industrial instruction. It is very generally recognized that what boys and girls need especially is to be fitted for their work. They need an industrial

education which will give them an insight into their work, something akin to what a professional man gets in his training. Manufacturers assert that competent, skilled workers are always in demand and that they are scarce. Competency and skill mean ability to work with economy of time, effort, and material as well as with a proper sense of responsibility. It is very evident that rapidity is a very important factor in production. Kropotkin in his "Fields, Factories, and Workshops" cites an example of one kind of celerity which he saw in a Nottingham lace factory, where "men with shivering hands and heads were feverishly binding together the ends of two threads from the remnants of cotton yarn in the bobbins." He calls this a "slave-like celerity," required because of the cheapness of factory labor, which is entirely different from the time-saving rapidity of the trained workman who easily and assuredly will economize time and labor.

It is this sort of training that some firms try to give their employés. The boys are taught various trades. Classes are held during work hours or evenings. They are supplemented by lectures on vital subjects such as hygiene, sanitation, diet, first aids to the injured, and other lines such as English, science, and Bible study. The National Cash Register Company has an agent's school for salesmen, one for advertising, one for officers for the study of business management, and others for the foremen, janitors and waiters. The same company has a kindergarten for the children of its employés and cooking, sewing and millinery classes, realizing that training which benefits the home makes better workers all around. The Heinz Company has cooking and sewing classes for its 700 girls most of whom are immigrants. The Williams Company in Brooklyn in-

structs its salesmen and other employés and provides lectures for the foremen. Many companies provide libraries and reading rooms with technical literature and popular fiction and magazines.

Some firms distribute manuals describing the details of the work. One corporation published a 200 page book with cuts and reports, and gave one to each employé who was supposed to read it all with special attention to the parts pertaining to his work. Quizzes are held frequently and those who are deficient in any subject are dismissed. The publication of the book cost \$2,000 but the company considers the money well invested. Each new man must read the manual so as to get a general understanding of the whole system. The effect has been good on both old and new workers, all making fewer mistakes. This makes it easier for the various departments to work together harmoniously. Each person knows why he is doing certain things, and as a consequence has much more interest in his work and greater enthusiasm. It gives him some comprehension of the part his work plays in the whole organization.

Firms are realizing more and more that definite instructions save a great deal of time—not only for the individual but for the whole house. It pays to develop the ability of each one, especially as really capable men are so scarce. A man may so increase his capacity by having favorable opportunities as to be a wonderful asset to the company. The Simpson, Crawford Company of New York has an instruction room where each new clerk goes for a preliminary training. There are four sessions of from one to two hours each. The idea is to eliminate girls who are not efficient right at the start. The school saves the company much time as well as thousands of dollars a year for they realize that trade

is often driven away by inefficient clerks. Other stores have this system too.

138. *Effects of welfare institutions in general.*—A concern which treats its employés rightly gets not only the interest of the employé but of the buying public as well. A close bond of union between the management and the workers is essential to a concern's high name and reputation. Under harmonious relations, the rate and amount of production advance, allowing the employer to realize a profit while the workman gets a sufficiently high wage to live in comfort and peace. In one past year the industrial betterment system of the National Cash Register Company netted the company \$30,000. It stands to reason that a modern business, progressive and well managed, will attract a better class of workers than one which is not progressive and takes no interest in the welfare of its employés. The lack of coöperation between employer and employé arouses the militant side of the trade unions, which results often in threats and violence. With coöperation and conciliation committees, any disputes may easily be settled, and the trade unions need no longer be defensive but may concentrate their energies on the development and elevation of the laboring classes which will assuredly bring about industrial peace. Man-power—the personal element in business—is certainly the most influential element. The ideal business is the one where the individual is not only a part of the organization, but where the business becomes a part of the individual worker both during and after work hours.

139. *Suggestion system.*—In order to encourage new ideas on the part of the employés and to arouse their interest in the management generally, the suggestion system has been introduced in many of the most progres-

sive business houses of to-day. It has been found to benefit both the employer and employé. Very often practical suggestions for improving methods are rewarded by prizes. Small locked boxes are distributed throughout the buildings and offices. They have a slit through which the written suggestion may be dropped. Each box is provided with a small pad of paper whose leaves can be detached. A carbon sheet is inserted so that there may be a duplicate sheet for the writer for future reference. Each suggestion must be signed by the writer in order to be considered. They are collected at regular intervals by a clerk who copies them without the name, and files the originals. The copy is sent to a committee representing both the employer and employés. These consider the suggestions and decide on the awards. The system produces some wonderful ideas, sometimes of great value.

The suggestions may include the following considerations: improvements in machinery; improvements regarding the comfort, safety and general welfare of the work people; saving of time and expense; prevention of the waste of materials; improvements in factory and office systems, such as the keeping of records, duplication of circulars and advertising; improvements in methods and processes of manufacture as well as designs of products and so on. The salesmen are also encouraged to make suggestions along their lines, such as improvements in the products they represent and methods of advertising. Sometimes the suggestions are not practical, but they are generally suggestive at least, and with some modification will prove useful. The prizes range all the way from fifty cents to one hundred dollars. The National Cash Register Company distributed \$6,070 in the year 1906 in prizes. In this year

they had over thirteen thousand suggestions, of which over a fourth were adopted. Sometimes the suggestions incur the taking out of patents. Some firms offer awards without a definite prize system. The rewards are generally distributed by progressive firms at a general gathering of all the employés at which a festival spirit prevails.

In order to make the system work properly there must be right relations between the working organization and management, between the worker and the employer. It seems to be a well-established idea that the suggestion system when properly managed is well worth while. It pays from a business point of view. Some business men object to the system because they think that the plan affords an opportunity for petty complaints and interference in things which are not the affairs of their employés. It is only by testing it and examining the actual suggestions received that a firm can find out whether or not this is the case. Whether or not the individual suggestions alone pay may be inferred from the following notes of improvements made through suggestions of the workers at the National Cash Register Company.

One man suggested that a certain advertising pamphlet be sewn with cord instead of tying it with ribbon. This will save \$36 per month. The prize was \$30. Another suggested the use of riveting machines for studs in special counter frames. The counter frames in registers are made in ten pieces. These were formerly riveted by hand, but doing the work on a riveting machine saves \$171 per year. The award for this suggestion was \$20. Another person suggested that a number of pieces of registers made with very expensive metal could be fully as well made with a cheaper kind of

metal which was just as strong. The saving amounts to over one thousand dollars a year. The prize award was \$30. A woman suggested an improvement in the engraving machine cutter by having a larger screw made for the spindle which holds the cutter on the engraving machine, making it more convenient for those who operate the machines. The award was \$10 dollars.

At the Cadbury Works near Birmingham, England, for every suggestion that is accepted and adopted, a prize is given from one shilling up to as much as £150 and £200 for exceptional suggestions. The following notes will give some idea of the character of the minor suggestions: A wire netting under the stools to put aprons and waste rags on; footstools in the shop; a scrap box with wheels; the removing of the lights overlooking the table to second beam in front, as they are of no benefit when the work is stacked; hooks fixed to wall to keep the window cords straight; repairing of the tin over the ventilator; the placing of a heat radiator in the Dental Surgery, as the fire grate is too small; the rolling of the top path in the girl's recreation ground, as it is rough and stony. These suggestions were carried out by the firm.

Aside from the mere profit to the employers, the suggestion system, by stimulating the flow of new ideas and commanding the best efforts of every worker, is a step in industrial progress. It fosters coöperation, and coöperation has been found profitable both to employer and to employé.

PART II

BUSINESS CORRESPONDENCE

CHAPTER I

THE ART AND ITS PROBLEMS

1. *Business correspondence in former times.*—It has been only in recent years that one could have spoken of an “Art of Business Correspondence.” Not only would the idea have been scoffed at formerly, but in reality there was no such thing. Business men wrote letters, it is true, but they generally regarded them as formal communications, which had to be expressed in certain set phrases. Very frequently their chief value was as records of transactions, the “black and white” of it. As tools which might be helpful in the conduct of business, their use was almost unknown.

This was only natural when commerce was not such an extensive affair as it is to-day, and the idea of transacting business with people all over the globe was undreamed of. But even after the lines of communication had been established and the mails were made one of the greatest avenues of commerce, the art of business correspondence lagged behind in the general improvement of the machinery. The great mail-order houses which were among the first to recognize the possibilities of the new way of doing business, relied chiefly on the pictorial art for increasing it, and other concerns which extended their reach to more than a local patronage likewise failed to take full advantage of their oppor-

tunities. The letters were still for the most part mere makeshifts, not tools.

2. *Old methods of instruction.*—To what extent this fact was the result of the teaching of business correspondence and the text-books on the subject can only be conjectured. At any rate what little instruction there was dealt principally with the mechanical forms of the letter—the salutation, complimentary close, etc. The body of the letter was also made as much of a mechanical form as possible, and models of various kinds of letters were given to be rigorously followed by the student. These models most frequently began and ended in some such way as this:

MY DEAR SIR:—

Your favor of the 13th inst. received and in reply would say:—

(Here follows the reply with a wealth of “herewith”s, “hereby”s, “pursuant”s, etc.)

Trusting to receive an early and favorable reply,

We remain,

Your obedient servants,

JONES & Co.

That kind of letter writing could obviously never become more than a poor crutch to business. And yet many books of very recent date encourage it. For that matter, too, some of them give models for letters of condolence, love-letters favorable and unfavorable, and the like. Such was their idea of correspondence.

3. *Growth of the art of business correspondence.*—It was not in the instruction either of schools or of books that business correspondence began to be recognized as an art. It was in the actual practice of busi-

ness men, and as usual it came as an outgrowth of competition. The struggle to get new business and to keep the old, since much of it was done by correspondence, necessitated improvement of the methods. Naturally those men who wrote effective letters had an advantage. Of course there have always been numerous reasons for the success of one firm and the failure of another, but among them the ability to write good letters or the lack of that ability assumed increasing importance. It is safe to say that at the present time nine-tenths of the notably successful business men and business houses of the country pay particular attention to their correspondence, and strive to make it reach its possibilities of accomplishment. Business correspondence is recognized as an art.

Moreover it is now being studied and taught as an art, although its development has reached only a limited stage as yet. Trade papers are beginning to devote space to it, a few books of advanced type have been published on the subject, and a few schools have taken it up. It is still in a formative stage, and much remains to be done.

4. *Purpose of business correspondence.*—In considering business correspondence as an art, we shall do well to consider its purposes, in so far as these differ from those of other branches of English composition, and see just what our problems are. This done we shall be better prepared to choose the means we shall employ to effect the purposes and solve the problems.

In most branches of English composition the purpose is either to instruct or to amuse. We possess knowledge that we desire to impart to other people, or else we have seen or heard something that interested and entertained us and desire to share the feeling with others. Ob-

vously neither of these purposes is uppermost when we are writing a business letter. Either or both of them may be effected incidentally; either or both may be helpful in achieving our main purpose. Indeed, we shall find that in certain kinds of letters they are of great importance. But practically all business correspondence is written with the view of obtaining profit: that is its prime purpose. All others are secondary to this. And the best business letters are those that with the most economical expenditure return the largest margin of profit to the sender.

It is true that not all business letters are written with the purpose of obtaining an immediate money return. Collection letters and sales letters obviously do have this as their direct intention. But when a man sends an order for goods, when he answers a complaint, when he applies for a position—in all these and a dozen other cases he is likewise aiming at a result that shall be commercially profitable to himself. Hence we may safely say that business correspondence is distinguished from other branches of English composition chiefly by the fact that it has as its main purpose, profit.

Profit necessarily involves action. A glance at the derivation of the word alone would be enough to assure us of this, if common sense and the maxims of the commercial world were not also at hand to help. For the word is derived from Latin words meaning “to do” and “for.” We want men to do things for us—that means profit. And to accomplish this we write letters to them, use the flexible and powerful weapon of the English language upon them. It has been well said that business correspondence is the art of using words “so as to make men do things.”

5. *Test of a letter.*—This question of purpose is in-

sisted upon at this length because there is frequently a tendency to look upon a letter as a production which may have merit in itself, apart from any effect it produces. The real test, and the only test of a business letter is this: Does it make your correspondent do what you want him to? Does he *respond*?

In this connection it is well to bear in mind another difference between letters and other forms of composition. A letter is ordinarily directed to a single individual. Frequently we see letters that remind us of the prayer of a noted clergyman which was reported by one of the newspapers as "the most eloquent prayer ever addressed to a Boston audience." It is possible for letters to suffer from similar misdirection of effort. It is possible for them, too, to be effusions that sound well—so well, indeed, that we find in them no other effect.

A letter should be regarded as a tool or a machine which has definite work to do. Nothing must interfere with its ability to do the work required of it. A machine may be a very handsome and interesting affair, but if it doesn't do the work it is cast into the junk-heap. A letter that is merely "artistic," a tissue of fine-sounding words—an end in itself—should likewise be cast into the waste-basket instead of graced with a postage stamp. The waste-basket is its ultimate destination anyhow.

The problem has thus become definite. Somewhere there is a man whom we want to do something for us. This we expect to accomplish by means of a letter. We are going to write a letter which will do the work, and we have no other test for the letter than its ability to do it.

6. *The necessity of conviction and persuasion.*—The

problem is far from being as simple as it sounds. In a way, it is more difficult than those of the scientist or the novelist who aim either to instruct or to entertain their readers. For it is easier to do either of these things than to incite to action. The old saying that "you can lead a horse to water but you can't make him drink" has its application here. The mere inertia of a man makes it necessary that some force be used to start him into a state of activity. His reason must be affected to convince him that the course of action we propose is wise. His emotions must often be touched to persuade him that the result of this action will be pleasurable. Frequently, too, he has prejudices that must be overcome before he will act.

Thus it will be seen that the art of the correspondent is similar to that of the debater or the salesman. It combines the necessities of conviction and of persuasion.

The manner in which conviction and persuasion are used varies greatly with the kind of letter, and will be discussed in connection with the separate kinds. But it may be taken as a general rule that the two processes furnish the chief means *to make men do things*.

Of the two processes, conviction is by far the more important for our purpose. Without it, the other is useless, for a business man is not likely to be greatly affected by what is commonly called "hot air." He wants facts, and conviction is a matter of the clear and forceful presentation of facts. "Facts are like bullets: there is no dodging them." To carry the simile a little further, persuasion alone is like a blank cartridge: it makes a good deal of noise, but it does not reach the mark. Therefore this treatise deals mainly with the proper presentation of facts. What kind of a presenta-

tion is proper is a question which involves a multitude of considerations, some of which may briefly be examined here.

7. *Correspondent and salesman.*—A comparison has been made between the task of the correspondent and that of the personal representative of the company, or salesman. The correspondent's task, of course, presents immeasurably the greater difficulties. In addition to the difficulty of gaining a hearing there are the difficulties of holding the reader's attention and of answering the objections that may arise in his mind. There are other difficulties, too, so obvious as hardly to need enumeration. The mere fact that the correspondent must depend on mere words in cold black and white seems at first to put him at an insuperable disadvantage when compared with the personal interviewer.

This, however, is by no means the case. Business men are apt to trust more to their heads than to their hearts, under the pleasing impression that the former is hard while the latter is soft. Hence they frequently have a wholesome distrust of the personal representative, while they welcome a written communication. And it is true that the letter does expose the truth or falsity of an argument more mercilessly than the salesman. But its very weakness is its strength. The adage "sell in person, but buy by mail," is so well recognized that the reverse may be an equally good rule to follow. At any rate those who have no deception to practice are not likely to be greatly inconvenienced by the fact that deception is more difficult in a letter.

8. *Letters and talk.*—Because a letter is in a sense intended to take the place of a personal conversation, the statement is frequently made that a good business letter should be as much like good talk as possible. To

some extent this is true, but it is by no means literal truth. Written words have far from the same effect as spoken ones. Many sentences that sound well enough when spoken are crude in the extreme when set down in black and white. Moreover, talk is a leisurely affair compared to a letter. Here everything must be condensed. There is no room for long-winded explanations. The facts must stick out so plainly that they can't be missed, and they must be set forth in language that is unmistakable. Real talk transferred to paper would be tedious if not grotesque in many cases, and in almost all cases, it would be ineffective.

The grain of truth in the statement is the fact that the letter should not appear stilted or pedantic. For that reason the use of colloquialisms and informal expressions is often desirable. But this is only one of many little devices that may be employed in writing a letter that will give a man somewhat the same impression that a talk with him might. A fuller explanation of these devices will be given later. Talk we do not want in a letter; what we want is to produce the effect of talk.

More than this, we wish to give the effect of our own personality and make the reader feel the influence. The letter is our business representative and it must as nearly as possible produce the same effect that our own personal contact would. We cannot afford to disregard the power of personality. Many letters do this by employing simply a string of stereotyped expressions and phrase-book sentences. Others do it by a stiffness and lack of flexibility that treats all kinds of letters alike. Little success can follow the use of such means. Nor can good come of imitating letters, much less of using set forms. For that reason, models are sparingly used in this treatise. The letters that are included are solely

for the purpose of illustration. They are not intended as guides.

9. *How to learn to write business letters.*—The only way to learn to write effective business letters, letters that will bring profit, letters that will make men do things, is by finding out what qualities good business letters generally have, and what principles are used in securing these and then practicing. Practice is the most important part of business correspondence, as indeed it is of all arts. Much can be learned by the experience of others, but more remains to be learned by one's own. And as every letter offers a new problem, it is best that a man have in mind only certain fundamental principles and general methods which he may apply in his own way to the solution of the problems. In this manner he is most likely to accomplish the purposes of business correspondence.

CHAPTER II

THE FIVE C'S OF BUSINESS CORRESPONDENCE

10. *Essential qualities*.—So far the subject of business correspondence has been considered from the point of view of the writer. It is now necessary to look at the question from the reader's point of view. If several hundred successful letters be examined it will be found that there are certain qualities common to all of them, qualities that obviously have much to do with their effectiveness. It is reasonable to assume that other letters that possess these qualities are more likely to be effective than those that lack them.

Analysis reveals five leading qualities that are common to good business letters. Others are found in certain kinds of letters, but these are common to nearly all, and may be considered the essential qualities. These five qualities may conveniently be called "The Five C's of Business Correspondence."

The five C's of business correspondence are as follows: Clearness, correctness, conciseness, courtesy and character. It is worth while to examine these more in detail and see what is the precise nature of each, and to some extent how it is secured.

11. *Clearness*.—First of all in importance is clearness. By this we mean that the letter should be written in such a manner that the whole meaning may be understood,—and what is more, that the meaning cannot be misunderstood.

The necessity of this quality is self-evident. And

yet many letters are written daily which lack this primary requisite. From them a large share of the business difficulties arise, for there is no cause more prolific of business disputes than misunderstandings. And as in letters these misunderstandings are hard to correct and involve delays and annoyance if not worse results, it is very essential that the writer's meaning should be made very clear in the first place.

Before considering the means which are helpful in securing clearness, it is worth while to look at the negative side, and see in what ways a letter may fail to be clear. Letters which are not clear are ordinarily of three kinds: the vague, the obscure, and the ambiguous.

12. *Vagueness and obscurity*.—A letter is vague when the meaning is indefinite. To say "please send me a copy of a book upon Wall street," would be decidedly vague—and yet orders for goods, even, are sometimes as vague as this. The cause is usually the failure of a writer to have his ideas clear in his own mind. He does not know exactly what he wishes to say; consequently the reader is not likely to understand him. A man must know what he wants to say before he can tell anyone else. "An ordinary shirt," "a plain mirror"—these are some of the expressions that find their way into letters. The remedy for vagueness is to be exact and definite in ideas.

Obscurity is somewhat different. Here the writer knows what he wants to say but is unable to conquer the medium of expression sufficiently to put his ideas into words. Take the following actual example:

Messrs. Hancock, Fish & Company,
15 Adams street, N. Y.

GENTLEMEN :—

Your letter to hand and contents noted and I will state, as I have in my letters before that the goods were taken out of the cases before they left your store, and I held the cases until your agent was heard and he said that it looked that way to him if the cases had been broken in any way I would have had the claim agent of the O. S. S. Co. come up and look at them but the cases had no signs of ever been broken open and under the conditions I do not think you have no claim against me for goods that were stolen out of these cases before you shipped them to me and I will refer you to your agent who was heard and saw the condition the goods were received.

Yours truly,

ABRAHAM JONES.

Here the writer has taken a great many words to explain what was really a very simple matter—and has failed to make it clear after all. The remedy in this case, as in most cases of obscurity is to have a thorough knowledge of the English language, and to follow the elementary requirements of grammar, spelling and the like.

13. *Ambiguity*.—Obscurity in letters is not frequent when the writer has a fair knowledge of the language, but ambiguities often creep into the work of even the experienced. Take the following instance:

The Seamen's Shoe Company,
Butte, Montana.

GENTLEMEN :—

Referring to your request for further information about our line of rubber goods, we would sell exclusively the Boston rubber boots and shoes which have sold themselves for the last ten years.

We have sold in the past five years more of this brand than all the other combined, which alone is proof of its selling qualities.

Mail us a trial order and satisfy yourselves, for if you purchase now you will always carry this line in preference to any other.

May we have an order to once for all have your patronage.

Very truly yours,

THE GOODWEAR RUBBER SHOE CO.

In this case, the writer evidently knows what he wants to say and has at least a fair working knowledge of his medium of expression. But a part of his letter is not clear. It may mean either of two things. Ambiguities of this kind are the most frequent and vexatious of all violations of clearness. Of course, in this case no harm is done, but often ambiguity is a source of business disagreement. As the cause of ambiguity is usually carelessness, the remedy is greater care.

Let us sum up, then, the precautions which are necessary, if vagueness, obscurity and ambiguity are to be avoided. The writer must know just what he wants to say, he must have a fair working knowledge of the language, and he must take care to see that what he says can mean but one thing.

14. *How to secure clearness.*—But more than this is desirable if the quality of clearness in its best form is to be secured. The writer should construct his letter in accordance with the principles which are explained in Chapter III, and he should always strive for the simplest and most direct expression possible. This means that his words should always be as short and simple as possible. Good, homely, Anglo-Saxon words are still the clearest and the fact that the least educated can under-

stand them makes them no less suitable for the best educated.

A story is told of a woman who hired a French maid, as she supposed. She soon found that the maid could not understand a word of the language, and although the servant proved satisfactory in every other way she persisted in giving her orders in French. In that way she punished her servant for the misrepresentation at the cost of being illy-served herself. Some letter-writers, for equally inadequate reasons, likewise use language that their readers cannot easily understand, with the similar result of being illy-served. In all cases it is a good rule to use words which the reader is sure to understand. And that means the simplest language possible. The "big men" of the commercial world are nearly all like Benjamin Franklin in one respect: they use simple, homely language.

15. *Correctness*.—Correctness is the second quality. As a man on first coming into a stranger's office is judged by the language he uses—yes, and even before he speaks, by the clothes he wears—so likewise is a writer judged first by the appearance of his letter in its dress and speech. And as he would have been condemned if his language in speaking had been inaccurate and crude, so he will even more surely be condemned if his language in writing is faulty. Incorrectness shows up far more glaringly in written language than in spoken, and is certain to be the source of some contempt, if not of actual distrust by well-informed people. More than one otherwise well-qualified applicant for a position has been rejected because of poor spelling or grammar. His deficiencies in these respects have appeared to be due to either carelessness or ignorance, and it hasn't mattered which.

A story is told of a young man who lost a position simply because in sending a telegram to his prospective employer he said, "I will be glad to come on those terms." The employer immediately telegraphed back, "The man that doesn't know the proper use of 'will' and 'shall' is not the man for me." This may seem like a small point, but it is largely upon such small points that correctness and incorrectness depends.

And in other cases the result of inaccurate and faulty expression has been to put writers at a disadvantage in dealing with firms and individuals whose commercial respect is most valuable. Nor will it do to say that "appearances are deceitful." They may be so considered when the appearances are good; but when the appearances are bad, every one takes them as a true index. Consequently no one can afford to neglect them.

A deeper reason might be found for insisting upon careful use of nouns and pronouns and verbs, attention to their agreement and the like. Care in this respect is likely to lead to care in all the little business details, the sum of which means so much. Certainly carelessness in it leads to carelessness in even more important matters. Therefore the writer who would be most effective is painstaking in his attempt to be correct in language.

Correctness is a matter that concerns not merely language, but also what we may call the dress of the letter; that is, the stationery, ink, and general appearance—all the mechanical details. Many a good business house has lost trade by the use of stationery that was cheap and incorrect. For this there can be no excuse. The right way is harder to find than the wrong, and requires no little labor and constant vigilance, but it

has its sure reward. Failure to find it and keep to it, has its sure penalty.

16. *Correctness dependent on usage.*—But it may be said, what is correctness, after all? Who shall say what forms of expression are correct and what incorrect, and still more what mechanical forms of the letter are correct? To this there is but one answer: it is purely a matter of usage. To be correct is to conform to what the best authorities have prescribed. What such concerns as Tiffany and Company, John Wanamaker, the National City Bank and the like accept as correct in their letters may safely be taken by the student as a standard.

This usage—or fashion—is an ever-changing thing. What was correct yesterday may not be to-day; what is correct to-day may not be to-morrow. It was once considered correct to sign oneself “Your humble and obedient servants.” No firm in this country would be likely to do that to-day. There have been times when ornate letter-heads were considered the height of propriety, and pompous, verbose language was a sign of greatest elegance. Simplicity is now the rule. So the changes in usage continually go on.

But usage in language and in letter forms changes much more slowly than in most other matters. Therefore a man who keeps abreast of the styles in clothing and hair cuts ought to do so in matters of equal or greater importance, where it is far easier. In later chapters correct use in stationery and mechanical forms will be discussed, and some of the more commonly violated usages in language. But correct use of the English language is a matter for a complete volume.

17. *Conciseness.*—The virtue of conciseness is so well recognized by business men that its necessity needs

little attention here. Obviously a letter should use no more words than necessary, for business time is limited and valuable, and cannot be wasted in reading unnecessary material. A long and tedious-looking letter is frequently cast into the waste-paper basket unread. If it is read, and is found to contain nothing to warrant such a demand upon the reader's time, he is likely to be so incensed over the intrusion as to give it scant consideration. Therefore it is well to have a letter concise.

18. *Brevity not identical.*—But conciseness is too often confounded with mere brevity. Brevity concerns itself merely with the length of the letter; conciseness has the additional idea of completeness. Business men easily get into the habit of writing brief letters, but in their anxiety to save their own time and that of their correspondents they are frequently liable to sacrifice completeness by leaving out something that is really essential. Sometimes this is in the form of whole sentences. More frequently the undue brevity is caused by the omission of pronouns, and the use of unauthorized abbreviations. Such a method is not conciseness. Conciseness is the quality of making one word serve for two, but the omission of a word that is necessary to grammatical completeness is not conciseness. It is pure slovenliness, as in the following example:

GENTS:—

Yours of the 17th inst. rec'd. In reply would say we have no record of such transaction. Would ask you kindly to repeat same.

Yr's resp.

J. JONES

By all means be brief. Avoid tediousness, as you

would the plague. You cannot afford to hide a grain of wheat in a bushel of chaff, for no one whose time is worth anything to you would trouble to look for it. But even more surely, do not sacrifice completeness either of your meaning or of grammatical sense to the desire to be brief. Be clear and correct, first. Then cut out every unnecessary word, and the quality of conciseness is added.

19. *True conciseness exemplified.*—As an example of true conciseness, notice the following letter. The returns from it were better than 32 per cent, and the cost of the letter was less than 3 per cent of the business received from it. Could anything illustrate better the value of true conciseness?

GENTLEMEN:—

“Merchandise itself cannot lie.”

You can make 100% clear profit on the B-M line of “Quality CabinETTES”—little sections of quality.

Ask for our dealers’ proposition.

Don’t bother about writing a letter. Just write across the bottom of this letter,—“I am interested.” Put it in the envelope and send it back.

Yours very truly,

BLANK & Co.

20. *Politeness a part of courtesy.*—Courtesy, like conciseness, is frequently confounded with a quality which contains only a part of it; in this case, politeness. Politeness is a well-recognized necessity. A letter which contains its reasonable proportion of “please’s” and “thank you’s” is obviously more satisfactory to the recipient than one which is brusque and curt. And it is true that many letters do fail of common politeness; in

frequent cases, especially where complaints are made, they are grossly insulting. Many business men seem to think that when they have a grievance, it is necessary to be very bitter in their expression to secure redress. The result is such letters as the following:

GENTLEMEN :—

Your last shipment of gent's hose is the rottenest stuff we ever had. We would like to know what you mean by sending that kind of goods to us. Every pair we have sold has lost us trade and the total will foot up in the hundreds. You must be in the business to make money. But we are not going to stand for that kind of business. What are you going to do about it? We expect to hear from you, right away quick.

Respectfully,
BLANK & Co.

Such a letter invites an equally hot reply, though it in no way excuses it.

Impoliteness has no place in business correspondence. It never does good, and frequently causes antagonisms that are commercially disadvantageous to both parties. Though there are other good reasons for not assuming a lack of honesty or intelligence in our correspondents, a sufficiently important one is that it does not pay. And politeness costs nothing.

As an example of the difference between a polite and an impolite letter, contrast the two following, which deal with the same kind of a question:

GENTLEMEN :—

On the 25th you say "Copy mailed to-day." That copy did not reach me. Mail another.

Yours truly,
BLANK.

It is the November issue that is wanted.

GENTLEMEN :—

The Central Y. M. C. A. is to-day in receipt of the February issue of the *Journal of Correspondence*, but has not received the January number.

As we are unwilling to miss any of the numbers of this valuable publication, we trust you will see that the missing copy is sent us at as early a date as possible.

Very truly yours,

BLANK.

It is possible to overdo the matter of politeness. For instance: "Please find enclosed check" seems rather absurd. When a favor is not asked, it is as well to omit the please.

Another case which is rather different, and in which a mistaken attempt at politeness results in real discourtesy is the frequent expression, "Thanking you in advance for the favor," etc. The implication that he necessarily will do the favor you ask is discourtesy enough, since it discounts the value of the favor; but the implication that you will not take the time to thank him afterwards is far worse. It is dismissing an obligation before it is made.

21. *Courtesy concerned with writer's attitude.*—The foregoing discussion has been concerned chiefly with what is ordinary politeness. Courtesy goes much further. It is a matter not merely of expression, but of the spirit behind the expression. In brief, courtesy means that your attitude toward the reader is such as you would wish to be adopted toward you. You show a regard for his feelings and for his interests, and attempt to encroach upon neither. This does not mean that your attitude is one of cringing or fawning; it is simply deference to him. In your letter you show that you have

attempted to look at the matter from his point of view. In giving this impression, which should be a true impression, there are several practical suggestions that may be of help.

One of the maxims of courtesy in former days used to be "Never begin a letter with I." This is no longer regarded as a strict rule. Indeed, there are times when its observance results in awkwardness of expression. But the maxim has a basis in real truth, and in real courtesy.

22. *Value of the "you" attitude.*—The word "I" should be subordinated in a letter as far as possible. The word "you" should be made prominent. The impression given by a letter in which every sentence begins with "I" is not at all pleasing, as is shown by the following instance:

DEAR SIR:—

I understand that you are about to erect a new house on your property at 318 Sixth street. I suppose you will soon consider the question of furnaces. I wish to call your attention to the Smith furnace which I handle. I can confidently recommend it as the best value for the money. I should like to have you call in and inspect the line.

Very truly yours,

THOMAS SHARPE.

Here it appears that the writer is chiefly concerned with his own interests and very little with those of his correspondent.

Compare the two following statements: "I should like to have you examine our Neverleak fountain pens;" "You will find it worth while to examine our Neverleak fountain pens." Examples might be multiplied indef-

initely, but these are perhaps enough to show the importance of emphasizing "you" and neglecting "I." One more example will serve to illustrate the value of adopting the "you" attitude in gaining the quality of courtesy.

CHICAGO, September, 1909.

DEAR SIR:—

I wonder if you realize just what it means to write *you* this letter.

You, as a shrewd business man and salesman (and every successful business man is a salesman) are accustomed to meeting, sizing up, interesting, swaying and convincing all kinds of human nature. You are versed in the art of handling your own arguments,—and an appeal, to win your interest at all, must be a mighty good one.

Yet if you had an offer to make—an offer as irresistible as this one of mine, you would want to tell me about it—even if you had to confine your whole argument and all your enthusiasm to one short sheet of paper such as I am using now.

For this offer has to do with something that means more profits for you in your business—a book on selling that actually strikes the keynote of human interest, and gets at this great problem of man-handling from an entirely new angle. This book shows you exactly how to approach your man; how to adapt yourself to his mood; how to get his attention; hold his mind to your subject; make him talk; how to introduce your proposition; make him feel the need of it; bring him to a state of desire; how to meet each objection instantly; recognize the psychological moment; and how to get his signature. Think what it would mean if you knew in advance the shrewdest, most clever and convincing schemes that sales brains had ever invented to meet the very problems that confront you every day in your business!

This book, "How to Increase Your Sales," has been written by twenty-two successful business men—star salesmen and star

sales managers; men who have studied out special selling methods of their own. And surely, out of all they know about handling men, you can gain some point that will prove of immense value to you. For they show you every clever move they found necessary in this great game of getting into the sales king row. And "How to Increase Your Sales" is absolutely free if you order now.

I want you to see this book. It comes to you absolutely without cost in connection with *System*, the big 250-to-356-page magazine of business.

You take no risk. I do not want any money for this book. And you need not even continue your subscription to *System* unless you are satisfied in every particular with the very first number. So I simply suggest that you sign the card enclosed, get the book and the first number of *System* without payment of any sort whatever, and then decide for yourself. If you don't see a dollar's worth in almost every page—an idea you can actually fit into the day's work of your business—simply tell me so. Your word will be final. I will cancel the subscription and the bill as well—promptly, cheerfully. The copy of *System* you can keep with my compliments.

Sign and mail the post card *to-day*.

Yours very truly,
PUBLISHER.

23. Character.—The rarest quality and for that very reason one of the most valuable is character. By this is meant the element of personality, the expression of the writer's own self. In reading a letter that possesses character we feel that we are listening to the real talk of a real person, not to the mechanical clack of a typewriter. We have a distinct impression of the character of the man, and can almost feel that we know him.

In a word the quality of character is the one which makes a letter distinctive, lifts it above the mass of letters to the elevation of a letter. It is the "something

different." Not that it means eccentricity or oddity. This is an extreme that is usually worse than colorless mediocrity. It is rather the frank and sincere revelation of a man's self, of his character. It corresponds closely with what in literature is called style.

24. *Character not secured by posing.*—Needless to say, the quality is not secured by straining for it. Such an attempt is likely to result only in the eccentricity that we have just condemned. Especially is this true when the writer assumes an air of geniality. It frequently leads to a kind of jocularly that breeds contempt, or a soft palaver that breeds suspicion.

The following examples will serve as a revelation of what is not character. We may call it an imitation of character:

DEAR SIR:—

I wish you could sit at my desk with me, just for one morning while I am opening the mail, for I should like to have you see the many letters we receive containing praise of our line of sewing-machines.

I should also like to have you step into the sales rooms of the Jones Company, where a complete line of our machines is shown, for if there is a single drop of salesmanship blood in your makeup, we know that your heart will warm with enthusiasm—you simply cannot help it. You will just want to get out on the floor and help sell the goods, because they DO SO HONESTLY represent the highest possible construction, workmanship, material, finish and mechanical features in the machinist's art. You will become enthusiastic in spite of yourself, etc.

Yours very truly,

DEAR SIR:—

Now comes the summer season when all nature is active and the farmer and residents of rural districts are turning their at-

tention to fields, gardens, and lawns. What looks more beautiful than the soft, velvety, grassy lawn of the suburbanite, and what looks more attractive to the artistic, as well as to the financial eye, than the flourishing gardens of farm and field?

Sincerely yours,

25. *Avoidance of stereotyped expression.*—The attempt to secure novelty and originality of expression, as well as a friendly tone has not been crowned with success in these cases. Nor will such a forced attempt usually succeed. But on the other hand, it is even more fatal to depend on the use of hackneyed and stereotyped phrases and methods of expression. True of all parts of the letter this is particularly true of the beginning, as will be shown later. Therefore it is unwise to start out with something like this: "*Yours of recent date received and contents noted,*" or "*Acknowledging your esteemed favor of recent date.*" Such a beginning is absolutely characterless. And in the body of the letter, such expressions as "*the same,*" "*herewith,*" "*beg to advise,*" take away the quality of character, particularly when used to excess, as is so often the case. For this reason the use of dictation-books and phrase-books is to be discouraged, as likely to destroy character.

It is not a bad rule to avoid the use of any sentence that seems to be expressed in what is miscalled the "language of correspondence." If your sentence has a familiar ring and if it seems stilted and lifeless, examine it carefully and see if the idea cannot be expressed more simply and directly. In nine cases out of ten, you will find a gain in clearness as well as in character. The sentence will seem to be your own. What is more important, you will speedily get yourself in the habit of expressing yourself in an individual way, and will no

longer have to cast about for a form in which to put your ideas. You will find that your letters possess *character*. All that is necessary, then, at the start is to avoid all stereotyped and hackneyed phrases and aim to be simple, direct and exact—write as you *think*.

26. *Result of obtaining character*.—A pleasing result of this is that the writer actually develops his own individuality by the practice. He begins by demanding that his ideas should be expressed exactly and originally. He ends by finding that the ideas themselves have become more exact and original. The gain in the individuality of his letters has resulted in a gain in his own individuality. On the other hand, nine-tenths of the men who use the stilted and stereotyped forms of expression become in time as mechanical as their expression. The one inevitably has its effect upon the other. Failing to write originally, men fail to think originally. They become fitted only for the position of clerk—mere cogs in the great machine. If you read the letters of any heads of important companies, you find in them little of the stereotyped. These men are original thinkers and they express themselves originally. Their letters have character. The quality must not be thought to be the product of genius. Anyone can have it. The man who expects to write effective business letters must have it.

The following letter from the head of a company to one of his subordinates has something of the quality of character:

DEAR MR. HAWKS:—

What has happened to Syracuse? Only \$600,000 new business for 1909? This is very disappointing. The company

expected your district to produce \$1,000,000 for the fiscal year ending March 31.

We based this estimate on your predecessor's work, as follows:

1905	\$375,000
1906	500,000
1907	750,000
1908	900,000

and judging from the condition of the country, \$1,000,000 was conservative. What have you been doing?

You started the year splendidly, but each month your work fell off. We see no reason why this should have happened, and feel that you did not work "full-speed" all the time.

The company has confidence in your ability, Mr. Hawks, to be a \$1,000,000 man. Won't you live up to that confidence?

Respectfully yours,

*Mr. John Hawks, Agent,
Syracuse, N. Y.*

CHAPTER III

GENERAL PRINCIPLES OF CONSTRUCTION

27. *Principles of construction.*—It is always much easier to recognize good qualities in the work of others than to secure them in one's own. Especially is this true in English composition of such a kind as business correspondence. Frequently only general suggestions can be given for securing them, suggestions which are necessarily vague. There are, however, some fairly definite principles which, if followed carefully, will help to secure the desired qualities. These principles it is our purpose to explain here.

The three most important principles of construction are the same that are recognized in all branches of composition: Unity, coherence and emphasis. But though the principles are the same, they are somewhat differently applied. In this chapter their nature is briefly discussed, and their application to business letters explained. Careful attention to them will be found almost necessary in securing clearness, and will be helpful in gaining some of the other qualities.

It must be understood at the outset that these principles are not in any sense rules. They are for the purpose of guiding the hand rather than restraining it. Nevertheless it may happen that a man who has written his letter and has found it unsatisfactory may revise it and by making it conform to these principles, improve it. But the best use of them is made when a man has them clearly in mind at the outset and works with the firm

purpose of embodying them in his letter. For a time the result may be somewhat labored and stiff, but with practice the writer will find them so thoroughly a part of his mental action that his expression will naturally and almost unconsciously be in conformity with them. The principles will become "second nature" to him.

28. *Unity in the whole letter.*—The principle of unity demands that the whole composition should center around one main idea. Applied to a letter, this means that it shall not be a series of detached ideas of varying importance with no one of them supreme. Letters which have this fault are by no means uncommon. Instance the following:

DEAR SIR:—

The weather prophets are foretelling a long and hard winter and now is the best time to prepare for such a season.

We now have in stock coats such as are worn by firemen. These coats are made of heavy black duck with a lining of black felt and interlined with oilskin, which makes them proof against wind or rain, price \$4.25.

Take our line of rubber clothing, all made by the American Rubber Co. It is impossible to buy better rubber clothing at any price. We have their rubber coats from \$1.75 to \$5.00 each.

We carry short rubber boots, prices varying from \$2.50 to \$3.75 for the Bull Dog brand and on men's Storm King boots prices are \$3.50 and \$4.00 on the Bull Dog.

We also carry a specially high grade rubber called the Bull Dog, which gives remarkable service. Satisfied customers everywhere testify to their durability. Bull Dog rubbers are made for us only and cannot be purchased elsewhere.

These are but a few of the many rubber goods we handle, for in addition you will find here, lowly in price but of high quality, druggists' sundries such as hot water bottles and syringes,

tubing for all purposes, including the C. I. tubing for pressure, hose for water, steam and garden use, and all rubber, such as packing, for mechanical uses.

If you are one of our customers already we want you to come in and look around, whether you buy or not, and if you have never been in, do so—it will be to our mutual advantage.

Yours very truly,

THE SMITH RUBBER CORPORATION.

Here we find no one central idea clearly expressed. The impression is of a scattered series of sentences. There is some connection in idea, it is true, but there is no singleness of impression. Even worse cases might be cited, where totally irrelevant ideas are put into the same letter.

Unity demands singleness of impression and to this end every unnecessary idea must be excluded. Everything that does not contribute to the one central idea must be cut out. If you are ordering goods, see that you do not make a complaint in the same letter. In this case the practical reason is obvious:—the two matters would not be referred to the same department in a large concern. What is a practical necessity here may be taken as a safe principle in all kinds of letters, whether the two disconnected matters would be read by the same person or not.

29. *Test for unity*.—A convenient test for this unity is to see if the whole letter can be summed up in a single sentence. If you can do this, you may be sure that you have followed this principle. This test-sentence, or “key-sentence,” as it is sometimes called, might be something like the following: “*The goods you sent us were not satisfactory*”; “*The matter you inquire about will*

be investigated"; "*It will pay you to examine our new line of winter overcoats*"; etc. Looking at the matter from the other side, a well-unified letter would contain only ideas that are an expansion of some part of such a sentence as this, and will contain all the ideas that are necessary for that expansion. The fault of including irrelevant matter is more common than that of omitting what is necessary, but the latter sometimes occurs. For instance, a man may be urging that the machine he has to sell is the best value on the market. If his entire letter is devoted to showing what good qualities it possesses, he evidently has accomplished only part of his task. He must show that the price is lower than others or that these good qualities he enumerated are not possessed by others, before he can prove that it is the best value on the market.

To take a more frequent instance, an order for goods that fails to specify the number wanted or the style, or the destination to which they should be sent, or the method of payment, is lacking in unity. So with other letters: if they fail to include matter which is necessary to complete understanding on the part of the reader, they lack unity. Summing up once more: Unity demands that all unnecessary material should be omitted, and all necessary material included.

30. *Unity in the paragraph*.—Unity is concerned not merely with the whole letter, but with the various parts of it. The paragraphs should each be unified. For instance, in a sales letter, one paragraph might center about the idea that the article was the best of its kind; another might show that it was not expensive; another, that this was a special opportunity to get it, and so on. Or each one of these ideas might be sub-

divided into parts. The same test may be applied here: if the paragraph can be summed up in a sentence it has unity.

In practice it is frequently helpful to make an outline of paragraph topics. A sales letter about some machine might have one paragraph devoted to efficiency, another to ease of operation, another to low cost, and so on. Then in writing the letter there is little danger that the paragraphs will overlap, or that something which should be said in the paragraph on efficiency will be found in the paragraph on low cost. The outline may be written on paper beforehand, if it is a long one, but ordinarily it will be possible to carry it in the mind.

31. *Unity in the sentence.*—The principle of unity is also applied to sentences. In regard to them we say “a sentence should contain one and only one complete idea with its modifying ideas.”

The principle is violated when one idea is split up into two or more sentences, or when one sentence contains two or more main ideas. An instance of the former is the following: “The book is very cheap. The price is only \$4.” This should read: “As the price is only \$4, the book is very cheap.” An instance of the other violation is the following: “The situation is very healthy as it is near the top of Mt. Washington, which was named after the Father of our Country.” Here the origin of the name has obviously nothing to do with the healthfulness of the location. Therefore one of the ideas should be omitted.

32. *Coherence in the whole letter.*—The principle of unity, it will be noticed, is concerned with selection. The second principle, that of coherence, is concerned with arrangement. It demands that the material be so

arranged and connected that the relation of the parts to one another is unmistakable.

The two parts of this requirement may be examined separately. In the first place, the order must be logical. What is meant by logical order is somewhat difficult to define. At least it may be said that there should be definite progress made. In descriptive writing it is frequently said that it is well to begin with one side of an object and work toward the other. In exposition it is often well to work from the simple to the complex. The reasons for orders of this kind are obvious: the progress must be such that the reader is led without difficulty from one part to another until he has arrived at some definite end.

Now in the case of business letters the purpose is usually to make the reader do something. Therefore it may be well to begin with his point of view and lead him gradually through a series of steps to the writer's point of view. Most frequently this will be found the logical and effective order: begin with what concerns him most nearly; end with what concerns you.

Take the instance of a sales letter. It would not be effective to begin by stating the fact that you want to sell something and end by showing him that he wants it. It is far better first to show him his need, and then to show that you can supply it. It would not be well to mention price (which is your concern) before you mention the good qualities of the article (which is his concern). Other applications of the principle will readily occur to the student. Some of them will be discussed in connection with particular kinds of letters.

It is not enough that the paragraphs should be in logical order, so that progress may be made. The

progress should be assisted by good connection between the paragraphs. This may be accomplished by means of transition sentences, which come either at the end of a paragraph or at the beginning. The latter is preferable. Usually it summarizes what has been said in the previous paragraph, and indicates what is still to be said. The device should not be used to excess, but it is frequently valuable. Illustrations of its use will be found throughout this chapter.

33. *Coherence in paragraphs*.—Coherence in paragraphs is applied much in the same way as in the whole letter. The ideas relating to the general topic should be placed in logical order, so that definite progress is made. In some cases this is a simple matter. For instance, in telling of business experience or of education, the order of events would be followed. The same thing is true in the case of a chain of circumstances which lead to the complaint or to the answer to a complaint. But in not all cases is this simple narrative order possible. In explaining the merits of some point of your machine over that of your rival, the order of climax would probably be most desirable. In all cases, careful attention to arrangement is necessary.

An important help to a smooth progress is gained by the use of the parallel construction. When several sentences in succession are similar in idea, they should be expressed in similar form. For example, note the construction of the following paragraph.

There are three kinds of connectives commonly used between sentences to aid the smooth progress of the paragraph. The first kind includes conjunctions, such as *and*, *but*, *however*, *nevertheless*, etc. The second includes demonstratives, such as *this*, *that*, etc. The third includes phrases which repeat the idea, sometimes in

the same words, of the preceding sentence. Of these the loosest and most frequent is the first kind; the closest is the last. All are useful, but it is well to guard against too frequent repetition of *and*. Use, instead, the more specific conjunctions and demonstratives.

34. *Coherence in sentences*.—The principle of coherence is applied to sentences in much the same manner as in the larger elements. The words should be in logical order, following the rules of grammar in respect to the position of modifiers. Similar ideas which form parts of the same sentence should be in similar form; that is, the parallel construction should be used whenever convenient. The words and phrases should be properly connected. If these requirements are strictly observed in the whole letter, the paragraphs and the sentences, it will progress smoothly and easily to a definite result. It is certain to be clear and correct, and thus to have a good basis for effectiveness.

35. *Emphasis in beginning the letter*.—Emphasis, like coherence, is a principle of arrangement; but is concerned, not with the internal arrangement, but with the external. It demands that the most important parts of a composition shall be placed where they will readily catch the eye. The most conspicuous places in a composition are the beginning and end. Therefore the most important sentences, so far as possible, should be placed here.

This principle has an important bearing on the old practice, which is still too common, of using the first sentence for a mere acknowledgment of the receipt of a communication, and the last for a formal “complimentary close.” While a certain amount of this may be necessary, as a part of the pure mechanical part of the letter, it is wise to reduce it to a minimum. Imme-

diately after the "Dear Sir" the real meat of the letter should begin. The strength of the opening is seriously impaired, if not destroyed, by such a beginning as this:

DEAR SIR:—

We beg to acknowledge the receipt of your letter of the 13th, instant.

Awaiting the pleasure of a reply, we are,

Yours very truly,

The principle of emphasis condemns the use of such hackneyed and relatively unimportant material at the most conspicuous places in the letter.

It must be admitted that the question of a proper beginning is difficult to answer. At least we can safely say that it should not be a mere formal acknowledgment. And yet it is frequently necessary that there be some acknowledgment of a former letter, just as a matter of custom.

There are three ways of overcoming the difficulty. The first is to place at the top of the letter, above the inside address, a line similar to the following:

Reply to letter of November 3, 1909.

Mr. Thomas Jones,

New York City.

DEAR SIR:—

This method, while sanctioned by authority, has received no general acceptance as yet.

The second method is to begin the letter with some important statement, and follow it with the acknowledgment in some such form as this:

This is in answer to your letter of November 3.

For instance, a reply to a request for information might begin in the following manner:

DEAR SIR:—

The next regular meeting of the Board of Directors of the P. & Q. Railroad will be held on Wednesday, November 14. This is in answer to your letter of November 3.

This method is rarely useful.

The third method, which is the most frequently used, is to weave the acknowledgment into the first sentence, but in such a way as to make it a subordinate idea. The easiest way is to say:

In reply to your letter of November 1, we wish to state, etc.

But this is weak and hackneyed. Better is something like the following:

We regret our inability to supply you with the information you request in your letter of November 1; or

We take pleasure in sending you to-day a copy of our new bulletin, as requested in your letter of November 1; or

We shall investigate the matter of shortage which you claim in your letter of November 1.

A little ingenuity will make it possible to open a letter with a sentence that expresses an important idea and at the same time acknowledges a previous letter. In any case, avoid a hackneyed, stereotyped opening.

36. *Emphasis in closing the letter.*—The same principle applies to the close. When you have said all you have to say, stop. It is not necessary, as some think,

to slide off gradually to the signature, by means of a long complimentary close. It is particularly weak to close with such participial expressions as

Hoping to receive,
Trusting to have,
Assuring you of, etc.

Whatever is worth putting at the close of a letter is worth putting in the form of a definite statement, and to put such ideas as

We hope to receive an early and favorable reply

in the form of a definite statement is absurd. Therefore, when they are needless, leave them out. Say your say, and then add, "yours truly." If possible let the last sentence be the one that you are most desirous of leaving in the mind of the reader. In view of our purpose in correspondence this sentence is likely to be the one that suggests that he *do* something. Therefore, emphasis usually demands that a letter end with the idea that gives the reader a clear knowledge of what you want him to do.

37. *Emphasis in paragraphs.*—In paragraphs, the principle of emphasis applies in much the same way. The first and last sentences should contain the important ideas. The eye in traveling over a page naturally pauses at the breaks in the reading matter and the mind has a longer time to dwell on the sentence that has just been read. The matter that is merely explanatory should come in the body of the paragraph; the ideas that you want to have remembered should come at the beginning and end.

38. *Emphasis in sentences.*—Likewise in this sentence, the important words should come at the beginning and end. Compare the two following sentences:

A machine that saves both time and money, the Owl Reeding machine, is the one we wish to call your attention to.

Your attention is called to the Owl Reeding machine, which saves both time and money.

Is there any question that the second is the more emphatic. Note the position of the important words, *time and money*. It might be further improved by cutting out the first part, leaving only:

The Owl Reeding machine saves both time and money.

If the general principle of having important words at the beginning and end of a sentence is kept in mind, most problems of emphasis in sentences will be solved. It may be worth while, however, to give a few definite suggestions.

Avoid placing parenthetical phrases at the beginning or end.

Bad. Moreover, our machine is the cheapest.

Good. Our machine, moreover, is the cheapest.

Avoid dangling participles.

Bad. The furniture is durable, being constructed of white oak.

Good. As the furniture is constructed of white oak, it is durable.

Usually place the cause before the effect.

Bad. We cannot supply this grade of goods as our factory was recently burned down.

Better. As our factory was recently burned down, we cannot supply this grade of goods.

Careful attention to the principles of unity, coherence and emphasis, in sentence, paragraph, and the whole letter, will be found almost invaluable in securing the Five C's. They will go a long way toward making a letter effective—so the reader will do what you want to have him do.

CHAPTER IV

SOME SPECIAL HELPS

39. *Suggestions, not rules.*—The general principles which have been given in the previous chapter are of the greatest importance in securing the essential qualities of business correspondence. They are especially necessary in securing clearness. But in addition to these there are certain special helps which should be carefully studied and practiced. These are enumerated and explained in this chapter. It must always be remembered that they are not definite rules, but merely suggestions. English composition is not a matter of right and wrong, but of better and worse. These suggestions are such as are likely to make for better writing—for greater effectiveness.

40. *Use concrete facts.*—Of the special helps in business correspondence that tend to give the desired qualities, the most important is the use of concrete facts. The necessity has been partially indicated in mentioning the things that help to convince. There facts are necessary. A business man will not be moved by general assertions; he must have evidence before he will believe. If you are trying to sell him a "Speedfast automobile," it will not be enough to say that it is the fastest machine built. That is mere general assertion, and of no weight. It would be but little better to say that it has won several races recently. That may be fact, but it is too general and indefinite. It is not concrete fact. But if you say that on October 9, 1909, the Speedfast, driven by Buffier,

won the Vanderbilt cup race with an average of 66 miles an hour, you are giving concrete fact. This is the kind of material that may help to convince a business man. What is true of circumstantial evidence is true of testimony. It is too general to say that drivers of high-powered cars praise Goodwear tires. Concrete fact would be the signed statements of these men that they prefer Goodwear tires to all others. The more of this kind of material you can give, and the less of general assertions the better. Records of achievement, well-authenticated, are of course better than anybody's opinions, but whichever is given, it must be concrete.

41. *Use concrete language.*—The language, too, should be concrete. By this we mean that it should give the reader a definite image. It should bring a picture to his mind or, in some way, appeal to his senses. There are many homely expressions, such as “getting down to bed-rock,” “striking the key-note,” “hitting the nail on the head,” and the like, which, by their concreteness, give force to any statement. Business correspondence is greatly helped by this kind of language.

A letter of an advertising agency recently contained the following statement: “Your hand should be at the wheel, not out on the gang-plank taking tickets.” This concrete way of putting it was far more effective than merely saying: “Your interests would be best served if you could give your attention wholly to the task of directing the affairs of your company, instead of being obliged to look after the advertising.”

42. *Avoid pretentious language.*—Frequently, in his desire to obtain individuality, or character, a writer will use pretentious language—flowery language, as it is sometimes called. This used to be the fault of many

journalists. To them a big fire was always "a disastrous conflagration," a luncheon was "a sumptuous collation," a small boy was "a mite of humanity," fish were "finny denizens of the deep," and so on. A man did not shout, he "vociferated"; he did not drink, he "imbibed" or "quaffed"; he did not sleep, he "wooed Morpheus"; and when he died, he "passed away" or "winged his flight to eternity." That style of writing is now nearly obsolete in newspapers, and it is well to avoid it in business correspondence. Concreteness of language is not inconsistent with simplicity and neither must be sacrificed to the other. In point of fact, the most concrete and forceful expressions are the simple, direct ones.

43. *Do not confound colloquialisms with slang.*—In letters language may be much more unconventional and informal than in ordinary compositions, and it is frequently desirable to introduce colloquialisms for the sake of making the reader feel more in touch with yours. Expressions such as "hard-pan," etc., often give the conversational effect to a letter which is one of its chief helps. The following is an example of good use of colloquial expression:

DEAR FRIEND:—

When anyone becomes interested in my K. D. furniture that person ranks as a friend. You cannot realize what enthusiastic "cranks" we who are making and marketing this furniture have become. Why, at our house, we talk "shop" morning, noon and night.

I know it is more than a business proposition. I know it is about to revolutionize a great industry—I know it is an economic advancement that will benefit everybody. I know it gives an opportunity to exchange little labor (which everyone has) and a little money (which everyone has) for something everyone

wants, but just a few have. I know—but enough—I could write a book without exhausting the subject, but the mission of this letter is to make you a customer.

I want a trial order from you. I want it right away—by return mail, and I am going to get it if you will accept the fairest proposition I know how to make.

Compare with this the following:

DEAR SIR:—

You don't need to be told that nobody is giving away a dead sure thing. The only kind of straight tip that is free is the kind you lose on. Now we are not trying to sell you any gold mining stock. But if you are open to a good proposition, it will pay you to cast your eyes over this.

It may be fairly supposed that the man to whom such a letter would be addressed, would be able to understand it. But for our purposes, this kind of jargon is valueless, and must be avoided in all business correspondence. Slang of whatever nature must be excluded.

44. *Avoid very long sentences.*—In all kinds of writing the use of long sentences is likely to result in a lack of clearness. Nowhere is this more true than in business correspondence. However clear the construction may be, a long sentence makes a greater tax upon the memory, and frequently upon the intellect, than a short one. A business man will not take the time to read a sentence twice to make sure of the meaning. Therefore, let there be no danger of his failing to get it the first time. The following is an example of what to avoid.

DEAR SIR:—

I am venturing to obtrude upon your time, on the assurance of Mr. Smith, Secretary to the German Consul (my uncle being

the German consul) and formerly a student in your school, who, while talking over opportunities in produce brokerage with me, suggested, "Why don't you consult with Mr. Brown and get his advice," which suggestion I am following out.

Aside from the fact that the language here is somewhat stilted and unnecessarily precise, the sentence is too long. It should be cut in two. For that matter, much of the material could be omitted. It is unnecessary to give any family history in asking advice upon such a matter. There are times, of course, when long sentences may be used to advantage, but in cases of doubt, make them short.

45. *Avoid monotony and awkwardness.*—The attempt to make sentences short must not result in a jerky and choppy style. It is well for that reason to see that they are properly connected, or that they are occasionally interspersed with longer ones. In fact, there should be as much variety in the construction as is practicable, in order to avoid monotony. A series of short, clear assertions is frequently relieved by a rhetorical question or an indirect statement or a quotation. Never overwork a favorite construction. For that reason it is not a bad idea to practice writing periodic sentences, loose sentences, parallel constructions and the like. In this way flexibility of style may be gained, so that the writer's work is not likely to be monotonous.

A worse fault than monotony is awkwardness. This is frequently the result of placing harsh-sounding words unpleasantly close to one another. (The preceding sentence illustrates the fault in a mild way.) Another cause of awkwardness is the repetition of a single word a number of times in the same sentence or in successive sentences; or the repetition of the same sounds, such as

the hissing "s" in this sentence. It is particularly awkward to have the same word or similar words with different meanings used in the same sentence. An instance of this would be: "In regard to the way in which he was regarded—." There are other kinds of awkwardness in language but those given here are the most common. As all of them can be detected by the ear it is a good idea to read letters aloud until the avoidance of awkwardness has become a matter of habit.

In addition to the special helps in business correspondence which are mentioned in this chapter there are others which apply to particular kinds of letters only. These will be discussed in their proper places.

CHAPTER V

MECHANICAL MAKE-UP OF THE LETTER

46. *Correctness the most important question.*—Although this treatise is intended primarily as a help to the work of English composition in the art of business correspondence, it would be incomplete without some discussion of the mechanical forms of the letter. By this is meant the external matters of paper, headings, business forms and the like.

In the mechanical forms of the letter, correctness is the chief quality to be sought for. It is particularly important here, because upon the appearance of the letter is based the first estimate of the reader. If there is any departure from the accepted standards, it is quickly noticed and may lead to unfavorable criticism, just as would be the case with an oddly designed suit of clothes. Some times a slight departure from the conventional may be rather pleasing, but in the main it is best to be conservative and stick to what usage has prescribed as correct.

47. *Business stationery.*—For most business uses, the paper used should be a sheet about 8 x 11 inches. This size is convenient for use in the typewriter and for filing purposes, and it is convenient for use with the standard envelope, which is 6½ by 3½ inches. Of course, it must be unruled, and preferably white or of some light unobtrusive tint. Bright-colored papers are objectionable, and there is nothing more dignified, and at the same time correct, than white. The necessities

of the typewriter demand that it be reasonably thin, but firm. Bond papers are most approved. Slight variations in size and color, and in fact variations in all matters of the mechanical form are sometimes permissible, but it is unnecessary to consider them in detail here. The student may profitably confine himself to what is certainly correct, until he feels sure of himself.

48. *Letter heads*.—As most business letters are written upon sheets that have a business letter head, it is worth while to consider the form of this. Although the nature of the business makes a vast amount of difference in the question of the correct letter head, there are nevertheless a few principles worth considering.

In the first place, it should be a *head*: it should not trail by means of a series of pictures or fancy borders all around the letter. It should take up not more than one-fifth of the space—the less, the better—and should not contain so much in the way of printing or illustration as to appear crowded. In fact, it is not considered correct now to use illustrative pictures of any sort in the letter head. Sometimes a trade-mark is used, but the best concerns avoid even this. The head may be engraved, lithographed or printed; in any case, the color should usually be black. Other colors are sometimes effectively used, but black ink on white paper is by far the safest and most correct form. The use of more than one color is always a sign of poor taste.

Advertising in the letter head is always objectionable. The business stationery should represent the firm, not advertise it. Moreover, advertising is useless, for a long list of articles that the firm sells is not read, and crowds the top of the paper. In addition, it may seem to indicate that the firm is in need of advertising—a fatal admission. Simplicity in the letter head is best;

THE *Wanamaker Stores*
Philadelphia Paris New York.

*Office of the
General Manager
New York*

TIFFANY & CO.
FIFTH AVENUE & 37TH STREET
NEW YORK

55 WALL STREET
NEW YORK

THE NATIONAL CITY BANK
OF NEW YORK.

The National City Bank
of New York.
New York.

CAPITAL FULLY PAID \$ 25 000 000.
SURPLUS \$ 25 000 000.
CABLE ADDRESS "CITIBANK"

Some Effective and Dignified Letter Heads

the name and business of the concern and the address are frequently all that is necessary. The members of the firm, or the officers of the corporation, the telephone number and cable address may some times be added. But everything unessential should be omitted.

On another page we show reproductions of letter heads used by some of the representative business concerns of New York City. With the business letter heads, are others of smaller sizes used for private and official business correspondence. Custom has not prescribed so rigidly for these; the main rule is that they should be simple and dignified.

49. *Color of ink.*—Closely related to the matter of a correct letter head is the matter of correct color in the ink or typewriting ribbon. Only black or blue-black ink is allowable in writing, and the typewriting may well be in one of these colors. Purple is also allowable, because of its usefulness in copying. Other colors should be used only to match the ink of the letter head where that is of some color other than black. The departmental service at Washington uses blue-black typewriting ribbons, and there are no handsomer letters to be found anywhere.

As the letter that is written upon a letter head differs from that which is wholly written only in the fact that nothing except the date is used in the heading, it will be convenient to consider now the letter that is wholly written. For convenience, it may be said to be divided into six parts: the heading, the inside address, the salutation, the body of the letter, the complimentary close, and the signature.

50. *Written heading.*—The heading, which contains the address of the writer and the date, should be placed at the top of the letter, close to the right-hand margin.

If it contains more than one line, they should be so spread that the ends of the lines all come approximately even at the right-hand margin.

The address of the writer should be written in such detail as the conditions which govern the receipt and delivery of mail in the town or city where the writer resides shall demand. If it be a city, his post-office address should usually include the street and number, city and state; if it is a small town, the heading should include the name of the post office, county and state.

Particular care must be taken when the writer's post office address is different from the place of writing, as is often the case in regions where the rural free delivery has been extended.

In case a request is made that the reply be directed in the care of a second party, the fact should be clearly denoted in the body of the letter and not in the heading.

Properly written headings always follow a definite order, and in this order the date comes last; month, day, year. The month may be written in full or properly abbreviated, but modern usage decrees that the day shall not precede the month, i. e., 10th January, as was the fashion some years ago.

Some writers indicate the month, like the day and year, by numerals, as 4-18-1909, but as there is doubt about the order, this method is not desirable in business letters.

The date should never be omitted from the heading of a letter. Many business letters prove utterly valueless when written without the date, and as evidence in a legal dispute a letter minus the date, and for which no date can be proved, is not worth the paper it is written on.

51. *Inside address.*—The name and address of the

person to whom the letter is directed, should always be written at the left-hand side of the page, and slightly below the heading. The first line should begin near the margin, the second line a trifle farther from the margin, and the third, if one is necessary, at an even greater distance.

On the first line the name is written, and, politeness coupled with custom, requires that some title be added. The commonest titles of courtesy and distinction are *Mrs.*, *Miss*, *Mr.*, *Esq.*, *Messrs.*, *Dr.*, *Hon.*, *Rev.*, *Prof.* Careful choice should be exercised in the use of them, but only two need be mentioned here as liable to wrongful use or disuse in business letters.

Esq., while originally applied to men occupied in legal pursuits, has become interchangeable with the plain *Mr.*, in a business sense; so, either *Mr. James S. Woods* or *James S. Woods, Esq.*, is proper.

Messrs., an abbreviation of the French word for gentlemen, refers to two or more persons engaged in business under a firm title which suggests the personal element, as *Messrs. Banks, Street & Co.* But the title *Messrs.* cannot be used in addressing men engaged in business under a purely legal title, as *The Pressed Steel Car Co.* There is no personal tinge to such a name.

It is well to note carefully that if a person to whom a letter is addressed possesses titles of dignity or distinction, they must always be used.

52. *Salutation*.—The salutation is the complimentary address at the beginning of a letter, and, in business letters, is practically limited to four forms: *Dear Sir*; *Gentlemen*; *Dear Madam* and *Ladies* or *Mesdames*. In exceptional cases, as in writing to governmental officials, the plain and highly formal *Sir* is used.

Abbreviation in the salutation indicates very bad taste, and such forms as *D'r*, *Gents* and *Sr* should always be avoided. If *My dear Sir* is written, care should be taken not to capitalize the middle word.

53. *Body of the letter.*—The general appearance of a letter has much to do with the effect which it will have upon the reader. Hence the arrangement of the letter upon the sheet with reference to the blank margins above and below should be carefully planned before a sentence is written. If a typewriting machine is used, the margins at the sides should be made deep, provided the letter is short, for a brief letter, in print, occupies little space and this space should be as near in the center of the page as possible. A half dozen sprawling lines across the full width of a sheet of paper look ungraceful. The material should be compactly grouped into a dozen short lines symmetrically bounded by wide margins.

If a letter deals with more than one subject, each subject should be denoted by a separate paragraph, and each paragraph should be clearly indicated by a deep indentation into the body of the letter.

Paragraphs should be indented an equal distance. In typewritten letters, five to fifteen spaces is the usual amount. Ten is probably the most common. In addition, it is helpful to leave a wider space between paragraphs than between the lines within the paragraphs.

54. *Complimentary close.*—The complimentary close follows the body of the letter. It should begin about midway between the right and left margins. It includes merely the words *Yours truly*, *Yours respectfully*, *Yours cordially* or *Yours sincerely*. The words *I am*, or *believe me*, or the like, which are sometimes used preceding it, are unnecessary and should be omitted. The order of words in the complimentary close may be re-

versed, as *Truly yours*. *Very* may be added, as *Yours very truly*, or *Very truly yours*. In any case, only the first word is capitalized, and the whole is followed by a comma.

Of the forms named above, those including *truly* are the most common and suitable.

Respectfully is sometimes used in writing to a person who is your superior in authority. It is also used frequently when a report is submitted.

Cordially is occasionally useful as a variation, and may be used to give a friendliness of tone.

Sincerely should ordinarily be reserved for use in personal letters, but sometimes it may be employed in business letters which deal with matters somewhat outside the ordinary routine.

The complimentary close must never be abbreviated, as *Yr's resp'y*.

55. *Signature*.—The signature comes last, and begins just below the complimentary close, and ends close to the right-hand margin. If a letter comes from a firm, the firm name is typewritten, and below it comes the written signature of the official who is directly responsible for it, sometimes preceded by the word *by*. Below this comes his title if any; such as *President*, *Secretary*, *Cashier*, or the like. This is also typewritten.

A man's title, such as *Prof.*, *Hon.*, *Dr.*, *Rev.*, and the like should never be written with his name as a part of his signature. It should always be put upon a separate line, if given at all, and should be in full, as *Professor of Greek*, or the like.

56. *General suggestions*.—A postscript is sometimes added, but *P. S.* is no longer used to label it. Formerly the postscript was used to express some idea which had been forgotten. Now, whenever it is employed, it is

for the sake of some important idea that the writer wishes to make particularly emphatic. For instance:

Remember, you do not have to send one cent in advance.

Only one side of the paper should be used, whether the letter is written or typed. A typewritten letter should ordinarily be short enough to go on one page. If more are necessary, blank sheets without the letter head should be used.

In folding the letter, the bottom edge should be folded up and brought exactly even with the top edge. Then a little more than a third of the letter should be folded over from the right; the remainder from the left. The free edge of the letter will thus be slightly below the right-hand crease. It should be placed in the envelope with the free edge toward the gummed side of the envelope, and at the top.

57. Envelope.—The envelope is preferably of standard size, about $6\frac{1}{2}$ inches by $3\frac{1}{2}$. The return address of the sender should always be printed or written in the upper left-hand corner. Usage prescribes that it shall not be large and conspicuous, and that it shall not be used for advertising purposes.

The address should begin slightly below the middle and should be well centered. The next line may be indented five points and the third five points more. The main thing to be considered is that this address look well balanced. Some concerns write the address without indentation; this is advantageous when a letter has to be forwarded, for more room is left at the right of the envelope for the forwarding address.

The order of the address is usually as follows: first line, name of the addressee; second line, street address;

third line, city or town; fourth line, state or country.

Care should always be taken that a business letter and envelope have no unsightly blots or finger marks or erasures. It is better to rewrite a letter entirely than to take any chance of marring the effect of an otherwise perfect page by one of these blemishes. Correctness and neatness in a letter, as in all business uses, are very important in winning a passage to the favorable consideration of the reader.

CHAPTER VI

ROUTINE LETTERS

58. *Inquiries*.—In ordinary routine letters, by which we mean inquiries, orders for goods, hurry-up letters and the like, and answers to these, the main qualities to be sought for are clearness, conciseness and courtesy. Of these, the first is by far the most important. It will suffice to give a few suggestions in addition to those already given in previous chapters.

An inquiry should be worded as briefly and clearly as possible. Do not go into a long history of your affairs to explain why you want to know a thing; go directly to the point. Some writers seem to think it necessary, when writing for a catalog of musical instruments, for example, to explain that they have been giving music lessons for several years and have not found instruments that suited them exactly. Even in answering advertisements, they frequently indulge in the following kind of prelude:

DEAR SIR:—

Having seen your advertisement in the Monday *Evening Gazette* and being in need of a good History of the United States, I am writing to ask if you will send me a catalog with specimen sheets of Smith's History of U. S. as advertised. I am deeply interested in historical work, etc.

All that is necessary in such a case is a note like the following:

DEAR SIR:—

Please send me a copy of your catalog with specimen sheets of “Smith’s History of the United States,” as advertised in the Monday *Evening Gazette*.

Yours very truly,

If you have several inquiries to make in the same letter, give each a separate paragraph.

110 East Tenth street,
SYRACUSE, NEW YORK, October 1, 1909.

Wm. J. Jones, Secretary
The Jones Business School,
New York City.

DEAR SIR:—

Before deciding to leave my present position to come to New York and take up a course of study in your school, I should like a little further information.

Will it be possible for me to take a position as bookkeeper and still carry on my studies satisfactorily?

Does the school give assistance in finding positions of this sort?

Is any degree given upon satisfactory completion of a regular course?

I shall greatly appreciate a prompt answer to these inquiries.

Yours very truly,

JAMES SMITH.

In all inquiries, be courteous but to the point. It is unnecessary to insert complimentary adjectives; such as, “your *expert* advice,” “your *valuable* experience,” “your *condescending* attention.” No apology is needed for an honest inquiry, and a fawning attitude does not raise you in the estimation of your reader. State your business and have done with it.

59. *Ordering goods.*—In an order for goods there are six simple but important requirements.

Give all details such as size, style, quality and the like, that can be of help in filling your order properly. In the case of a book, the title, author and publisher, and sometimes the edition or binding are necessary.

If there are several articles, arrange them in the form of a list with a separate paragraph to each item.

State how money is sent and what the amount is, or explain how you wish to make payment.

State how you wish shipment to be made: by mail, express or freight.

If you need the articles before a certain date specify this.

Do not neglect to write in full both the address of the firm to which the order is directed, and your own address.

60. *Examples.*—The following is an example of a poorly written letter:

SOMERVILLE, Feb. 16, '09.

Litt Bros.

Phila. Pa.

DEAR SIRs:—

Please send at once a dozen fruit jars, a package of writing paper and envelopes, a pair of heavy shoes, six cakes of soap and a post card album. I need the things now, so hurry them along and I will pay the bill when they arrive.

Yours,

JAMES SHEVLIN.

None of the articles mentioned are described sufficiently. The writer's address is not complete since the state is omitted. "Dear Sirs" for "Gentlemen" is not considered good usage to-day, and, in form, the letter is sadly deficient.

The same letter properly written would read:

SOMERVILLE, N. J., February 16, 1909.

Litt Bros.,

Philadelphia, Pa.

GENTLEMEN:—

Please send me the following articles by Adams Express as soon as possible:

1 doz. Mason fruit jars, quart size;

One box of gloss finish, unruled white note-paper and envelopes, about 40 cents in price;

A pair of heavy workman's shoes, size 8, broad, worth \$2.50;

Six cakes of 10-cent Tar Soap;

An album large enough for 500 post cards, plain cover, at \$1 or \$1.25.

Enclosed you will find a money order for \$6. As you pay express charges, I will ask you to refund any balance due me.

Yours truly,

JAMES SHEVLIN.

It would be no trouble for the receiver to fill an order so clearly and completely described. And the manner and means of shipment and payment are down in black and white in such form that the most heedless clerk would have no excuse for making a mistake.

61. *Enclosing money.*—There is a risk in sending money, unsecured, by mail, whether in bills or coin. It is usually safe to enclose a one or two dollar bill in an ordinary envelope, but a check, postal money order, bank draft or express money order guarantees delivery and does not cost much. Sums from five dollars up should always be sent by one of these methods.

Amounts under one dollar may usually be sent in one-cent or two-cent postage stamps, the latter preferred. Stamps of higher denomination than two

cents are sometimes difficult to use, and should not be sent. In sending money to foreign countries, never mail United States stamps, for they will be of no value to the receiver.

In sending stamps always insert a sheet of oiled paper against the gummed side of the stamps. If this precaution is not taken, a rainy day and a careless mail collector may bring your letter to the receiver in a valueless state. Stamps stuck together are food for the waste basket. It is a good plan to place the stamps in a separate envelope, noting on the envelope its contents and the amount. The envelope should then be folded into the letter.

Never send coins by mail unless they are fastened securely in a slotted sheet of cardboard. Nothing larger than a twenty-five cent piece should be sent in this fashion.

For large sums checks or drafts are the proper vehicles. Persons possessing private checking accounts can usually procure bank drafts of the cashier without extra charge, and the expense to others is only a matter of a few cents. Bank drafts, like express and United States money orders, are perfectly safe, and if they should be lost or burned enroute, the money can be recovered.

In sending money by mail it should be stated in the letter in exactly what form you are mailing the money, whether in stamps, bills, check or draft. Should anything happen to the money alone while on the way this precaution may be a valuable clue in tracing the leak.

It is well to write below the letter at the left hand side the abbreviation *Encl.*, to indicate an enclosure. If you enclose two or more checks or other papers write *2 Encl.*, *3 Encl.*, etc.

62. *Hurry-up letters*.—After an order has been sent to a firm and some time has elapsed without the receipt of the goods, it is often necessary to send out a “hurry-up” letter, in which you urge that the transaction be completed. In letters of this kind it is well to be courteous. Nothing is gained by casting slurs upon the business methods of the firm or upon their motives. But it is also well to indicate that this particular case may prove an unpleasant example of the firm’s business methods, and is of much real annoyance to you. It is preferable to ask them to “hurry up” as a business principle, rather than as a special favor to you. However, it is sometimes helpful to point out the urgency of your necessities.

Ordinarily, the letter would begin by giving the circumstances which lead to the *hurry-up*. The details in regard to the order should be given clearly and exactly. If it was not acknowledged, it should be repeated entirely, as it may not have reached the addressee. Otherwise it is enough to give the date and nature of it. Following this a brief statement that you would like to know the cause of the delay is usually enough.

If the first letter is unproductive of results, a second and a third may be sent. These will be worded in a manner that may be more irritating, in a degree to vary with the seriousness of the case. But even in these, courtesy should be observed. It would not be wise to write:

DEAR SIR:—

I have brought to your attention several times a matter which you have seen fit to ignore. I do not know what kind of a place you were brought up in, but it occurs to me that ordinary decency would demand a reply from you.

Much better would be a reply in the following tone:

DEAR SIR:—

For some reason I have received no reply to the letters I have sent to you in regard to my order of November 1. That reason you doubtless can tell me, and I should very much appreciate the courtesy of an immediate answer.

This kind of a letter is equally suitable in any case, where your letters have remained unanswered.

It is well to request an immediate answer, in any case. If you can secure a reply and a promise from your correspondent, he is more likely to hurry about filling this order.

63. *Examples.*—

I

October 30, 1909.

Messrs. Gray and Brown,
Providence, R. I.

GENTLEMEN:—

We have been greatly surprised at our failure to receive the four porcelain lined bath-tubs, No. 8, ordered from you on October 10. We are in great need of these at the present time. Please let us know immediately just how the order stands and when you can make shipment so that we may know what we can count on.

Very truly yours,

AMES BROS.

II

November 6, 1909.

Messrs. Gray and Brown,
Providence, R. I.

GENTLEMEN:—

On October 10 we sent you an order for four porcelain lined bath-tubs, No. 8, to be shipped as soon as possible. On October 30 we wrote asking when you could make shipment, but have received no reply.

Nearly a month has now passed, and we are suffering great inconvenience from the delay. You have certainly had time to answer our inquiries, and we must ask you to give the matter immediate attention.

Unless we can have the goods by November 12, we shall be compelled to cancel our order.

Very truly yours,

AMES BROS.

CHAPTER VII

COLLECTION LETTERS

64. *Factors that influence the nature of collection letters.*—To make a man pay what he owes, requires the most skillful use of the art of business correspondence, the art of using words so as to make men do things. Conviction is always necessary and frequently persuasion. In the construction of these letters the general principles of all business correspondence may be followed. In addition, there are a few suggestions which may be applied.

The method of writing a collection letter depends to some extent on the class of person it is directed to, and the length of time that has elapsed since payment was due. There are generally three classes of people to whom collection letters are sent. The class that is habitually slow about payment must be stirred up by calling attention to their business responsibilities. The honest man who through some misfortune has been obliged to neglect payment may have your sympathy, but at the same time he should be made to realize that you are likewise being placed in a difficult position, and that you are being compelled to suffer from causes even more remote than his. He may be reached by argument and induced to do as much as possible in the way of settling your claims. The deadbeat is not easily influenced by either of these methods. He must be threatened with the expense and annoyance of legal processes.

65. *Character undesirable.*—Except in special cases,

collection letters differ from all other kinds in one important respect: the quality of character is lacking. That is to say, instead of making your letter a personal appeal, in which you try to give the reader the impression of your own individual personality, you try to make your request as impersonal as possible. It is a part of the machinery of business, and comes as the inevitable consequence of the lapse of payment—not because you were looking for your money.

The reason for this is that a man does not like to feel that he is being individually “dunned.” He regards it as a persecution, and resents it accordingly. But if it is made to seem like a mechanical matter, for which no individual is responsible, he does not feel personally aggrieved, and is more likely to pay up.

66. *First letter.*—On account of this psychological principle, the first collection letter sent to a man is usually a printed form. It is worded very formally and concisely. Sometimes it is merely a line printed at the bottom of the statement of his account and reads something like this: “Your attention is called to your account, which is long past due.” Or it may be a printed or typewritten form like the following:

DEAR SIR:—

Enclosed you will find a statement of your account. This was due on October 1, but has evidently escaped your attention. We shall appreciate a prompt remittance.

Yours very truly,

Whatever the form, the letter should be as brief and impersonal as possible. You cannot afford to take the chance of offending a good customer, and thereby losing him. He should be reminded of his obligation, but

should not be allowed to feel that he is the object of special attack.

67. *Second letter.*—The policy of business houses in regard to credits and collections differs so much that a discussion of it here is impossible, even if it came properly within our subject. Some concerns give the customer considerable time, and continue to send only formal notifications. Others believe in following him up closely with more urgent requests for payment. But most of them have a second kind of letter, used sooner or later, which differs from the first kind which has been discussed. This second kind of letter may not be sent until a number of formal notices have been sent without result.

It usually is a longer and more urgent request of a nature dependent to a great extent on the kind of man to whom it is addressed. As a rule, however, it should give the idea that it is purely a question of business, and against the writer's inclination. The sympathetic kind of letter often wins where a brutal letter would not. As an example take the following:

DEAR SIR:—

Enclosed you will find a statement of your account, which has been running for some time. We feel that some definite steps should be taken toward closing it up. It is our policy to be as lenient toward our customers as we can, but if we are going to continue in business we must have money to do it with.

You yourself know what trouble arises from failure to collect money due you. For this reason you ought, in all fairness, to help us out. Mutual accommodation is, you know, the cornerstone of our business system; we must aid one another.

Will you not let us know by return mail, just when we can count upon a remittance from you?

Assuring you of our hearty coöperation, we are,

Yours very truly.

Occasionally a man may be reached by a humorous appeal such as the following, which is quoted from the book of Chas. R. Wiers:

DEAR SIR:—

In times of trouble one naturally turns to his best friends first. We send you the enclosed statement in the same spirit that the New Jersey man showed toward Bill Nye. When Nye asked him indignantly, "Why do you charge me one dollar for a sandwich?" the Jersey man answered candidly, "Well, the fact is, I need the money." That is our only excuse for troubling you.

Sincerely yours,

In fact, the art of collection has many tricks and no one method will serve for all the delinquents. But as a matter of principle, it is better to depend mainly on the merits of your case. You have sold goods and the buyer has incurred an obligation to pay for them. He should be made to realize that the foundation of the credit business is the fact that people can generally be trusted to pay their obligations, and, therefore, he is doing injury to others as well as to himself by his delinquency. Exclude from your letter anything that may give him an idea that you have doubts about his paying ultimately. He will pay—but you want to make him pay now. And to do it you have the right, and possibly the necessity, to use every business argument in your power.

Note that your arguments should be *business* arguments usually. You should not need to appeal to his sympathy. It is well enough for you to sympathize with him; the reverse is not frequently useful.

Some men cannot be moved by business argument, because it is a part of their own business principle to

dodge obligations whenever they can. Neither can they be moved by appeals to their sympathy, or their sense of humor, for they usually have neither. The only thing that impresses them is a club. If you are sure you are writing to such a man, your tone might be something like the following:

DEAR SIR:—

You have continued to overlook your account of \$500 with us, in spite of the fact that it has been due over six months, and has been brought to your attention every month. We are not in the business of lending money indefinitely without interest, and that is precisely what you are asking us to do. We must insist upon an immediate settlement.

Yours very truly.

68. *Third letter.*—If the formal notices and the argumentative letters fail to make a man pay his debts, it is necessary to resort to a final letter. In this you threaten to resort to the law to obtain a settlement of your claims. Such a letter should be short but to the point. It should convey the impression that you would regret taking such a step, and will do so only because he has compelled you to. But it should leave no doubt in his mind that you will do it.

Most of all, avoid making vague threats, and references to legal action. State very specifically and definitely that if you do not receive payment or some satisfactory settlement before a certain date, you will put the matter in the hands of your attorneys.

The following is an instance of this undesirable “veiled threat”:

If you will favor us with a payment, we shall be perfectly satisfied, and our business relations will continue as formerly.

Much better is the following letter:

November 19, 1908.

*Mr. John Hewlett,
Hoboken, N. J.*

DEAR SIR:—

We are very much surprised that we have heard nothing from you in response to our letters of October 30th and November 6th, asking for remittance to cover your balance of \$18.50.

These goods were sold you on thirty days' time, and we believe you will admit that we have been very patient. However, as it is absolutely necessary for us to collect our accounts in order that we may continue in business, we insist on immediate settlement of this account.

If we do not hear from you by December 1st, we shall be obliged to place the account in the hands of our attorney for collection. We trust this action will not be necessary.

Yours very truly,

CHAPTER VIII

APPLICATIONS AND RECOMMENDATIONS

69. *Answers to advertisements.*—In applying for a position the general principles for all letters hold good. The quality of character is particularly important, because it is only by the letter itself that you can show your personality, and your personality is likely to be of some interest to the prospective employer.

In answering an advertisement be brief, but to the point. Often it is enough to say:

Please grant interview. I believe I have the exact qualifications you desire.

If the position is one for which applications are likely to be numerous, as a place as bookkeeper and the like, this method is often as effective as any.

But if the requisites of the vacant position are so numerous and difficult as to eliminate all except a small number of applicants, so that a longer letter is fairly certain to be read, it is worth while to go more into detail. State clearly and concisely your reasons for believing you have the requisite qualities and give evidence wherever possible. If you lack some one of them, the fact may be stated frankly, provided you give sufficient evidence of adaptability to lead to the belief that you can acquire the necessary knowledge.

Usually some account of your education and experience is essential. In addition, your present salary and your reasons for wishing to change your position may be given. Although it is obviously not worth while to claim for yourself such necessary qualities as honesty, fidelity and accuracy, it is often helpful to mention some special talent you have, which will be valuable in the position you are applying for.

Whatever information you give, make it definite and specific. Do not say, *I have considerable experience in bookkeeping*. Say rather, *I was assistant bookkeeper in Blank & Company for two years*, or something of that sort. Instead of *I have a good business education*, say *I took the regular two year course in Jones Business Institute, from which I was graduated in 1907*. In all cases be as concrete and definite as possible. Give references when requested, and whenever else you think they may be of service.

70. *Evidence*.—As evidence is always desirable, you may enclose letters of recommendation, or other material, such as blue-prints or the like. Newspaper clippings are sometimes useful, if they refer to work you have been engaged in. If you have written any magazine or trade journal articles on some special branches of the work you are engaged in, copies should be sent, for they furnish the strongest kind of evidence of your ability. Especially if the position is at a distance, so that you must obtain it mainly by correspondence, you should send every bit of corroborative evidence you have.

But after all, the letter itself is the strongest evidence you can give. For that reason, too much pains cannot be taken to see that it is neat and attractive and in

correct form. Do not get hotel or athletic club stationery to write an application on. The implication it gives may be fatal to you. And do be sure to be courteous and characteristic—and that implies sincerity and frankness on your part. Your aim is to distinguish yourself from the other applicants, to show the employer that you are a better man for his purposes than any of them. You cannot hope to succeed in this, unless you show cause.

This question of distinction applies not only to the material you present, but to every part of the expression. Especially is this true of the end. Nine-tenths of the men will end, "Hoping to receive a favorable consideration," or something of that sort. Therefore, you should avoid it. End with the strongest thing you can say about yourself, or with a frank statement of your intentions in case you are given the position. Then say, "Yours truly."

71. *Examples.*—Models are to be particularly avoided in writing an application, as they are likely to be destructive to the very necessary quality of character. However, we append one bad application and a few good ones as illustrations.

15,¹ MONTGOMERY ST., JERSEY CITY, N. J.

Sept,¹ 19th,² 1909.

Siegel, Cooper & Co.

DEAR SIRs:³ I⁴ am looking for work and if the place⁵ you ad.⁶ in to-day's *Herald* is what⁷ you say it is I would like to

¹ The commas are incorrect here.

² Omit *th, nd, etc.*, in writing the date.

³ No longer correct; use "*Gentlemen.*"

⁴ Not a strong beginning; to say you are out of work may give a bad impression.

⁵ *Position* is better.

⁶ Incorrect abbreviations. Spell out the word.

⁷ Do not imply that they have misrepresented.

have it. I^s have had experience enough to make a good man for you, for I have been working in dry goods stores for the last five years. My education is pretty fair &⁹ can give good references. Let¹⁰ me know something about the job, what are the hours and what will you pay?

Hoping to hear from you by return mail, I am,

Yours,

J. ADDISON SMITH.

October 21, 1908.

Mr. James E. Johnston,
The Novelty Manufacturing Co.,
Albany, N. Y.

DEAR SIR:—

Answering your advertisement in the *New York Herald* for an advertising man, I ask that you consider my application for the position.

I am twenty-two years of age, and a graduate of The University of Illinois, where I completed the scientific course.

My qualifications for the position you offer are as follows:

(1) I am a college man and have therefore had a good drill in English.

(2) For the past twelve months I have had charge of the correspondence and follow-up advertising matter of the Novelty News Publishing Company, which publishes the *Novelty News Monthly*.

(3) I have produced results in the way of increased circulation of *Novelty News*, increasing it 15 per cent.

Enclosed you will find specimens of my follow-up letters and advertising circulars.

I refer you to A. B. Jones, manager of our company, who will verify my statements.

^s These details are too indefinite.

⁹ Never omit necessary pronouns, such as *I*.

¹⁰ Do not ask about hours and pay until you have shown fitness for the position.

In general the letter lacks all five C's.

I am making this effort to get into your firm because I am particularly interested in the advertising of novelties.

Yours very truly,

JAMES BROWN.

20 WEST 155TH ST.,

NEW YORK, N. Y.,

October 15, 1908.

Mr. John Smith,
New York City.

DEAR SIR:—

I wish to apply for the position of accountant and bookkeeper which you advertised in yesterday's *World*.

I am twenty-eight years old, educated at a college in Germany, in which country I have worked for three years in a leaf tobacco business as accountant.

Coming to America in 1902 I entered the cigar-factory of Messrs. H. Anton Buck & Co., New York, as bookkeeper. After a few months' work I was sent to the branch factory in Tampa. Here I worked myself up to the position of office manager, holding the power of attorney at the same time.

After three years this branch factory was consolidated with the New York concern and I went back to my old place, where I am still employed.

Several reasons make a change desirable and I would start to work for you for \$25 per week.

I speak German and Spanish, both of which are needed in your line of business.

Respectfully yours,

ERNEST OAKES.

73. Recommendations.—Recommendations are very similar to applications in most respects, except that they usually deal with a much more limited extent of information. In writing of another man's work, you necessarily deal with only that part which has come within

your own personal knowledge. Consequently a recommendation is usually even shorter than an application.

The recommendation should always be concrete and specific. A vague "testimonial" to a man's good character and ability is often of more harm than good. Tell what he has done and can do, so far as your knowledge goes. Evidence is of just as much value here as anywhere. In addition your own personal opinion is of value. Your commendation will add weight to the facts you tell about him.

His character, too, may come in for some discussion. In an application, of course, a man cannot conveniently tell about his good moral qualities. This can be done in a recommendation, however, and has its uses there. The tone of the letter should be straightforward, frank and decisive. Letters of recommendation have been so much abused that one which is lukewarm and apparently evasive or noncommittal does a poor service to the man. But on the other hand it is well not to indulge in effusive language or glowing praise. Tell the man's good qualities plainly and simply and then stop.

In form, recommendations are of two kinds: the open letter and the personal letter. The first is usually only a certificate of character, addressed

To whom it may concern:

It is necessarily shorter and much less effective than the other. The personal letter directed to an individual is of more value, and is preferable from the standpoint both of the writer and of the man about whom it is written.

74. *Examples.*—

NEW YORK, October 5, 1908.

.....,
 , ,
 ,

DEAR SIR:—

Replying to your inquiry of the 3rd instant:

Mr. John Blank was in our employ from August 21, 1905, to September 28, 1906, as an assistant accountant. During the larger period of his service his compensation was \$20.00 per week. Owing to his efficiency as an assistant accountant his compensation was increased in September, 1906, to \$25.00 per week, but soon thereafter he voluntarily left our service to associate himself with Mr. Smith. He did very satisfactory work both as assistant and in charge of small engagements during the latter part of his service, giving promise of development that would warrant promotion to the rank of accountant in charge. His industry and habits were both entirely satisfactory.

Yours very truly,

CHAPTER IX

ANSWERS TO COMPLAINTS

75. *Necessity of them.*—It may truthfully be said that the best way to answer complaints is to conduct business in such a way that there shall be no complaints. But, as a matter of fact, no business was ever so conducted, and while human nature remains in its present imperfect state the business man will always have to smooth over a great many disputes and difficulties that arise despite all precautions. And to appease a man who believes he has just grounds to complain and still keep him a friend requires the most careful use of the letter-writer's art. But before considering the answer to a complaint, it is worth while to consider the way in which a complaint should be written, if you have to make one yourself.

76. *How to make complaints.*—Courtesy is the most necessary quality in a complaint since it is the one most likely to be violated. A man who has a grievance is tempted to express himself as bitterly as he feels. But harsh language almost never does any good, and very frequently delays settlement of the difficulty. It usually leads to an interchange of compliments that is degrading to both parties concerned and leaves them sworn enemies. Such exchanges of sarcasm and vituperation as the following¹ are by no means uncommon:

¹ Actual letters except for the names. Quoted from *Commercial Correspondence* by Albert G. Belding.

UTICA, N. Y., Jan. 31, 1905.

*The Jones Shoe Company,
Brockton, Mass.*

GENTS:—

Rip, rip, rip! is the order of things with us since we received that last case of so-called ladies' fine shoes. What are they made of, anyway? Is it leather, or an imitation, and what did you use for stitching, paper or thread?

Our patrons are returning shoes from that case on an average of three pairs a day. What do you suppose we are going to do with such shoddy? We thought you were real shoe men who understood their business. We expect to hear from you right away, quick.

Yours, etc.,

PETER ROWE & SONS.

BROCKTON, MASS., Feb. 2, 1905.

*Messrs. Peter Rowe & Sons,
Utica, N. Y.*

GENTLEMEN:—

Your very kind favor of the 31st ultimo is received and we are obliged to you for your pleasant way of putting things. Your letter comes to us as a beautiful sunbeam on a dark day. You must have had quite an inspiration to enable you to write such a gem.

Now when you get cooled off and can come down to business, send us the shoes returned to you, together with the balance of the defective case, and we will see whether we can do anything for you. Again thanking you for your favor, we are,

Yours truly,

THE JONES SHOE COMPANY.

It is always well to be sure in the first place that you have a grievance. You may have apparent grounds for complaint when in reality the other man is no more to blame than yourself. He may not even know of the

difficulty. Therefore, it is well to tell him the whole story clearly and simply. Then you may state how you wish the damage repaired, or wait for him to make the advances.

77. *Answering ordinary complaints.*—When some one writes to you complaining of shortage, or damage, or delay in receiving his goods, or the like, your task is more difficult. Especially is this true if his letter is angry in tone. He must be pacified and kept a customer if possible. To this end it is well to begin the letter with an expression of regret and sympathy. Then you can explain how it was that the cause for complaint occurred, and show that it is not likely to occur again. You would naturally end by expressing a desire for a continuance of his patronage, and assuring him of better service in the future.

If the damage or delay or other trouble was not caused by your fault, but by some mistake or negligence of the transportation company or other agency, the task of explanation is comparatively easy. Settlement in such a case is also easy. If, on the other hand, your company is responsible, it may be more difficult to pacify him, and keep his patronage. It is best to shoulder the responsibility and be frank about the matter. But at the same time you may show that precautions have been taken to avoid a recurrence of the difficulty.

In doing this, you should be concise and specific. Long-winded, vague explanations and promises are valueless. Nor is it necessary to reveal all the inside workings of your business to show how the mistake occurred. The main point is to soothe his ruffled feelings and convince him that service in the future will be all that he can desire.

78. *Example of what not to do.*—The following example is a good instance of what not to do:

THE QUICK-PRINT COMPANY,
23 EASY STREET,
NEW YORK CITY, January 2nd, 1909.

GENTLEMEN:—

In answer to yours of the 29 ult. You complain that the catalog we printed for you was not delivered until two weeks after the date we promised and the paper was heavier weight than you ordered, thus increasing your postal bills, and the ink on a considerable part of the edition poor. Of course you can't expect first-class work at the price you pay. You could not get anywhere near as good done anywhere else at the price. Besides, we think you are unreasonable in kicking about the paper, which is of a better grade than the one you ordered, which could not be procured at this time.

We cannot always be responsible for delays. This time it was a strike that tied up our establishment for several days. Then many of the men were green and so could not work as well as the old. It was one that caused the bad ink, by letting it dry on the rollers, but we have threatened to discharge him if it happens on one of your jobs again. There probably was not more than 5 per cent damaged in this way, which is not very serious. We are sorry that it happened, for we like to have a reputation for good work, no matter what the circumstances are. We will do better next time.

Hoping you will give us a chance to show you what we can do when we try and thanking you in anticipation, we remain,

Very truly yours,

THE QUICK-PRINT COMPANY,
Per I. B. SLOW.

79. *Answering complaints about goods.*—When someone complains of the goods themselves—that they are not as represented or are not worth the price, a

delicate touch is needed. This is especially true if the writer demands some rebate. Whether you yield to this demand or not is a question of business policy into which we cannot enter. If you do not, the reasons may be concisely stated. In any case you need to free yourself from the charge of misrepresentation and at the same time avoid any implication that his claim is not made in good faith. The following letter handles this situation fairly well:

DEAR SIR:—

We have read your letter of June 8th carefully and feel deeply sorry that you are not satisfied with the goods sent you. If you will kindly state just what the goods are and when they were shipped, and will tell us just what is the matter with them, we shall be able to take up the matter in detail and tell you what can be done. We want all our customers to feel that they are well treated when they deal with us, and you will find us anxious to make every fair adjustment that is possible.

It would help us greatly in tracing the shipment if you could send us the invoice you received through the mail, and if you would check on that the articles which have disappointed you.

We shall do our best to arrange the matter to please you.

Very truly yours,

80. *Answering unjust complaints.*—Some complaints are, of course, utterly unjust, and the claims unwarranted. In such a case you must be courteous but firm in telling him that you are not at fault. Do not tell him he is “barking up the wrong tree,” or “kicking about nothing.” In fact, the word complaint, and similar words, should be kept out of your letters. But clear yourself of the charges in a dignified way and suggest that he take especial pains to verify his assertions. A good example is the following:

DEAR SIR:—

We regret to learn that you were not pleased with our last shipment of canned goods, and regard them as unsalable, because of their unattractive labels.

It is true that we have preferred to put the money into the goods themselves, not into a brightly-colored label. But the proof of the pudding is in the eating, you know, and when your customers have once tried our Eclipse brand they will be satisfied with no other.

You might put the goods on your shelves, at least. You may find that they disappear so fast that the scenery is not marred by them.

We carry brands with bright labels, of course, but the Eclipse is so far ahead of them at the price that we have almost decided to discontinue the others.

You are not the first to eye with disfavor the rather simple and unobtrusive appearance of this line of goods, but if you put them on your shelves and call your customers' attention to them occasionally for a week or two you will find that they *sell*. If you do not have this experience, you will be the first of our many patrons to be disappointed.

For whatever their looks may be, they are the *best goods at anything like the price*.

Very truly yours,

81. *Answering inadequate orders.*—Sometimes a concern receives an order which omits some essential details. The answer to this, requesting a better order, should be handled delicately, much as an answer to a complaint is.

In answering an order like that on page 282, the following kind of letter would not do:

February 20, 1908.

Mr. James Shevlin,

*Somerville, N. J. (?)*¹

DEAR MR.² SHEVLIN:—

We hereby³ notify you that your esteemed⁴ letter of the 16th inst. was received, and received⁵ prompt attention. We are unable to fill your order, however, as the said order⁵ does not tell what kinds and quality of goods you want. Moreover⁶ you do not state how you wish the goods⁵ shipped, and enclose no funds.

If you will send the necessary information regarding the quality and kind of goods desired, and enclose a sufficient amount to cover transportation at least, we will attend to your order immediately.

Yours very truly,

JONES BROS.

The following is a correct answer to a letter ordering goods:

James Shevlin, Esq.,

February 20, 1908.

Somerville, N. J.

DEAR SIR:—

We were pleased to receive your order of November 16, but as we wish to be sure of filling it to your entire satisfaction, we would ask that you furnish us with a little additional information regarding the articles you desire.

The Mason fruit jar, quart size, is the kind which we sell to most of our customers. The price is one dollar (\$1) per dozen. Perhaps this brand and size would suit you unless you have some especial preference.

We would also ask that you denote the size required in shoes,

¹ Do not insult a customer by a question mark.

² "Dear Sir" should be used in a purely business letter.

³ Such a word as "hereby" is generally unnecessary, and gives a deadening formality to a letter.

⁴ A meaningless word.

⁵ Repetition of words should be avoided.

⁶ "In addition" would be much better.

and the price you wish to pay for them. A fuller description will be necessary for the other articles, too, in order that we may select them to as good advantage as though you were here in the store and could make your own choice.

We want to have the goods meet your best expectations and shall be pleased to have you write us fully so that complete satisfaction may be insured.

Yours very truly,
LITT BROS.

CHAPTER X

SALES-LETTERS

82. *General principles.*—The most important and at the same time the most difficult kind of letter is the sales-letter. Other letters deal with the problem of conducting business which has already been secured; this deals with the problem of getting new business. The stress of competition makes success very difficult, but if attained it pays big returns on the investment. A thousand letters may cost perhaps \$50 for the supplies and mechanical work. The returns may be nothing or may be several hundred dollars—in many cases they have totaled up in the thousands. The profit is the result of the brains and skill of the writer. He must know how to use words “so as to make men do things.”

As has been stated earlier, there is no formula for constructing the letter. But it should first of all have the Five C's of business correspondence. The principles and suggestions of earlier chapters will also prove helpful. Other suggestions vary with the nature of what is to be sold. In general it may be said that in all cases the reader's interest must be aroused at the start, he must then be convinced of the desirability of the thing you are trying to sell, and of its probable profit as an investment. Finally his will should be stimulated so that he will *order*.

In considering the application of these principles, it is worth while to divide sales-letters into two classes: those that try to sell some material thing, or article, and

those that try to sell ideas. These classes might be still further subdivided into letters selling real estate, letters selling machines, letters selling household articles, etc. For most purposes, however, these two classes will be found sufficient.

83. *Showing the need.*—In selling a thing, whether it be a house and lot or a baby carriage, it is necessary first to make the reader realize that he has a need. This may be done by asking a question; such as,

Have you ever thought of living in the country, where the air is fresh and pure, and where children can have room to play and grow strong?

Or,

Do you ever find ink stains on your fingers after using your fountain pen?

Or it may be a direct statement:

You would not use a quill pen now. There is something better to be had.

You want the most modern invention in writing instruments. The Jones typewriter, etc.

84. *Appealing to the emotions.*—After you have shown the reader his need of something, you must show that what you have to sell will fill the need. In the case of real estate, you would describe it with such faithful representation of nature as would make him feel that this is the very place for him. All its good qualities—light, air, room, beauty of location, accessibility—all these would be told in such a way as to appeal to his senses. In fact, many articles are sold by the

skillful use of description—the appeal to the senses.

The following passage from the letter of a steamship company, describing a pleasure trip, is a good example:

DEAR SIR:—

May we offer a suggestion for your winter trip abroad? Would you include the Adriatic and the quaint old cities which dot its shores? If you could comfortably visit, on a luxurious cruising steamer under the guidance of a company with years of experience in conducting pleasure cruises, the old Venetian cities of Dalmatia, of historical prominence centuries before the discovery of our own country, yet to-day in comparative obscurity, would you take advantage of such a splendid opportunity? If so, then a word or two about the cruises of the Pan-American Line to visit this interesting country may not be amiss.

The beautiful rock-bound coast of Dalmatia and its numerous islands, winding channels opening into noble havens, in which are ensconced quaint old cities nestling 'neath lofty precipices, all these offer a new field for tourist exploration. Far from the beaten track of travel, a land thoroughly unhackneyed, the appellation of "the half-forgotten country," bestowed upon Dalmatia by the Austrians, is indeed a fitting one. What better rest-cure for an American than to traverse the streets of these primitive cities and imagine what the world was like when there were no stock exchanges.

With almost numberless articles this idea of appealing to the senses can be applied. The shaving soap that doesn't smart or dry on the face, the automobile that is smooth-running, handsome and roomy, the breakfast-food that has the flavor, the candy that is perfectly delicious—all these things and a myriad others are made desirable by the sense or emotional appeal.

85. *Appealing to the mind.*—With machinery and

similar articles the case is somewhat different. The purpose of such articles is usually to make money, in one way or another—whether by saving time or labor or by increasing efficiency. The construction has usually to be explained, so that the reader will clearly understand how it accomplishes its purpose. The appeal is made to the mind, to the common sense.

Thus a typewriter is shown to be efficient in saving time by means of the visible writing which obviates the necessity of lifting the carriage to see what has been written, by the ball-bearings which eliminate friction, etc. And so on; every part of the construction is explained.

The following example shows a good use of explanation:

DEAR SIR:—

Are you desirous of reducing your expenses, and of increasing the efficiency of your plant? Then the Otis gas engine is what you want.

Under your present methods you have a large boiler which entails considerable expense. First you must have it inspected from time to time; second, new tubes are constantly required; third, your plant is at a standstill while the new tubes are being supplied; fourth, it requires two men to keep the boiler in perfect condition. All this expense can be saved by simply installing the Otis gas engine.

This engine, first of all, will give more power than you have at present. Second, it is run by one man. Third, the space of the boiler and of the coal is saved. Fourth, your bill for gas consumed by the engine will be two-thirds of your coal bill.

Now, I have shown you that the Otis gas engine can save you expense, can save you space, and furthermore increase the efficiency of your plant.

Can you afford to continue to operate your plant under the

present method? If you are convinced that you cannot, we shall be glad to have your order; if you are in doubt, read the enclosed booklet.

Respectfully yours,

86. *Concentrating on the talking-point.*—Whatever kind of article you are creating a desire for, by appealing either to the senses or to the mind, you must emphasize the points which distinguish your article from every other one of its kind. It will be wanted only if it is different from the others—and better. This distinctive feature we may call the “talking-point.” Success in sales-letter writing depends largely on properly picking out and using this “talking-point.”

To take a concrete instance, suppose you are trying to sell a house and lot in some suburban village. You must show your prospective customer, or “prospect,” just how that house and lot is different from any other he could get at the price, and better. What the talking-point is depends largely upon the “prospect,” for different qualities appeal to different men as of prime importance. But in any case you should concentrate on one.

The value of this is shown constantly in advertisements. These invariably harp on some particular excellence possessed by their article and by no other. The soap that “floats” or is “99 57-100 per cent pure,” the clothing that “fits well around the neck,” the varnish that “shows only the reflection”—these are but a few instances of talking-points in advertisements. In the same way the sales-letter should have a talking-point. You haven’t time to explain everything; you must take the one essential point and hammer that in.

87. *Proving the case.*—But the task is by no means

finished when you have shown the customer his need, and shown him that you can supply it with an article that is better than any other of its kind. You must *prove* that what you say is true. The average business man is from Missouri: he has to be shown. This proof can be given only by concrete evidence.

The best kind of evidence is in the form of figures. They cannot lie; they show conclusively that the article effects a saving. A good instance of that is shown by the following passage from the letter of a real estate dealer:

You pay rent, do you not? Suppose you applied that same check towards a home of your own. You would not be paying out any more money, and at the end of a few years, instead of being the disgusted owner of a pile of musty receipts, you would be the owner of a fine house and lot.

Here are the figures: prove to yourself that it can be done.

Similarly the man who says his addressing-machine saves money proves his statement by showing how the office boy at \$6 a week can do the work of two high-priced stenographers, and he gives figures to show what saving would thus be effected in a year—enough to pay for the machine twice over.

88. *Tests and testimony*.—Another effective way of giving proof is by means of comparisons and tests which can readily be made. A paint manufacturer tells how his white-lead may be tested, a maker of acid-proof ink explains how the enclosed sample of writing may be tested, and so on. A good example of this kind of evidence was given in the letter of a paper manufacturer. He said:

You can prove the excellence of "Oldtown Bond" in a second. Just tear off the corner of this sheet; then tear a corner off one of your present letter heads; now get a magnifying glass and examine both torn edges. You find long fibers—linen threads—on ours, while on yours the fibers are short, woody.

Many of these tests, of course, are not applied by the reader. But he is convinced of the truth of the statement. In a similar manner, he may be influenced by guarantees. Records of tests which have already been made are all similarly valuable to a less degree, and may be used effectively.

The weakest kind of evidence, but valuable, nevertheless, is that of some one else's testimony. The "testimonial" has been so much abused by patent-medicine fakirs and others, that it is often worse than nothing. But if it is by a well-known and responsible person, especially one who is recognized as an authority on matters of the kind, it may be of very great weight. It need not be added that he should be an unprejudiced person, not one who himself has an interest in the sale.

89. *Getting the order.*—After you have proved your statements there is only one more thing necessary, but that is the all-important one. The prospect must be induced to order the article. This is usually done by making the process as simple as possible. You should, figuratively speaking, take hold of his hand and say, "Sign here."

You may often accomplish this by enclosing a postal card or blank form, all filled out except for the signature. Or at the end you may make a very strong appeal to him to begin the saving immediately and therefore order without delay. Your slogan at the end

of a letter is always "Do it now," and this command should be as originally and effectively phrased as possible.

But whatever you do, do not talk too long after you have convinced a man. End your letter while he is at white heat, and leave in his mind a very strong conviction of the desirability of the article you have to sell, and a clear knowledge of what he must do to obtain it.

90. *Examples.*—The following examples illustrate these principles:

DEAR SIR:—

Would you care to install in your foundry yard an appliance which could be relied upon to save more than its cost of installation in the first six months?

We offer you such an article in the Century convex pig magnet. You will be able to unload a fifty-ton car of pig iron or scrap with the magnet in less than two hours, whereas you now require the labor of from three to five men for an entire day. Furthermore, you will unload nothing but iron, no ashes, ore, dirt, or coal. Your saving in this way alone will amount to enough to make it worth while to install the device, to say nothing of the labor saved.

In April we installed two five-thousand-pound magnets for the Vulcan Iron Works; one in their receiving yards and one in their bar mill. They tell us that in the eight months during which the magnets have been in use there has been a saving of labor amounting to over \$8,500; the magnets cost \$7,250, installed complete, and cost about \$175.00 per month for labor and electric power.

Are these figures significant?

Won't you sign the enclosed postal card and fill in the date and time when you wish to be interviewed? Our man will then call on you and give you estimates on the cost of complete installation, as well as suggestions for improvements in the

method of handling your raw material and products in your yards if desired.

Very truly yours,

DEAR SIR:—

Have you ever stopped to think of the great advantage the office force possesses whose records are run on the loose leaf system over those who struggled with the various old-style systems, which, fortunately, are now passing out of use?

We are enclosing a folder which gives the talk delivered by Mr. Frank Watt at the Merchants Business Show in your city last month; it will pay to read this little article, as Mr. Watt is an expert accountant of high renown and when he advocates anything in the way of business system it can be taken for granted that his statements are true.

Imagine the modern bank with its fifty or one hundred thousand active accounts trying to run them on the old bound ledgers. "Impossible," you will no doubt say. The ledgers alone would fill a good-sized building.

If you will drop the enclosed postal card into a mail box with your check mark placed opposite the item or items in which you are interested, the matter will have our attention immediately. Or better still, write us a note stating your wants and we will then be in a position to advise you more fully.

We hope that we may soon have the pleasure of serving you with our suggestions.

Very truly yours,

91. *Sales-letters for ideas.*—Selling ideas is even more difficult than selling things. In the class of "ideas" we would put books, insurance, and the like, but more especially advertising systems and other propositions where the brain-work more than the handiwork of man is concerned, and where little that is tangible passes into the hands of the purchaser.

The fundamental principles that are true of letters to sell things are true of the letters to sell ideas. But, of course, the appeal is entirely to a man's reason and the work of explanation is more difficult. In general it is necessary to show how your proposition will prove a money-maker.

The proof can be given sometimes by figures, but more frequently by the testimony of others. They tell what the proposition has done for them. The reader feels more assured that it will do something for him.

92. *Examples.*—

DEAR SIR :—

If you could find a man who could sit down at a desk in your office and write four or five really clean-cut business letters—letters that roused your enthusiasm and sold you *your own goods*—you would not allow that man to leave your office until you had offered him a good salary to devote his energies to the promotion of your interests. Such a man would come high because he would be experienced, tactful and accustomed to earning a good salary but you would accept any reasonable proposition which he might make you.

Our business is based on the extensive demand and limited supply of such men as that. We have a staff of the best correspondents in the country, many of them retained for special work by the largest and most successful corporations in the country. Each man was selected for some especial qualification in some line of work but this does not prevent all from giving advice and criticism on every subject of importance from a business standpoint.

The enclosed booklet explains the purpose of our work more fully than can be done in a letter. Read this carefully, then select two or three of your sales promotion letters and send us. These will be reviewed and criticised by the man who is most familiar with your line and this man will write you a letter

in the effort to interest you in the proposition you offer to the public. At the same time he will outline briefly a selling campaign which can be handled without care on your part and at the minimum expense for such service.

This first letter and advice costs you nothing and unless we can show where we can increase your profits and save you money, our efforts cannot be expected to produce results. Will you not act on our suggestion at once and see what there is in this plan for you and for your business?

Cordially yours,

THE UNIVERSITY CORRESPONDENCE COMPANY.

DEAR SIR:—

Wasn't it Artemus Ward who said:

“Konsider the postage-stamp; its usefulness konsists in sticking to a thing until it gits thar.”

Whoever it was, he might have added that its usefulness depends largely on the thing it carries. A stamp that carries a useless letter costs the same as the one that carries a good one.

That makes a difference when you are sending out thousands of them.

Are *you* wasting any stamps?

Perhaps you do not have time to attend to your sales-letters as you could wish. At any rate, you would be willing to let someone else attend to them if he could get better results.

Why not let us? We cannot make your goods, but we can sell them. That's our business; we are specialists in it; we have been doing it for five years. And we get *results*. Our sales-letters are sales-getters.

How can we write stronger sales-letters than the man who makes the goods, and knows them best? Well, we know human nature; we have made a special study of it. And we make a study of every article that we undertake to sell, until we know every one of its good points. And we know how to show them.

You don't have to take our word for it. The Smith Company, Messrs. Jones & Sons, Messrs. Black & White, and others, have

tried our system and are still using it. After we had written the sales-letters of The King Company for two months we wrote to them and asked how they liked it.

This is their answer:

*The University Correspondence Co.,
New York.*

GENTLEMEN:—

If you can only keep up the pace you have set so far, we shall have not a word of complaint to make. Our sales have increased 30 per cent. You told us the truth. Your sales-letters are certainly sales-getters.

Very truly yours,
THE KING COMPANY.

If we can succeed for others, why not for you?

Of course we can.

All you need to do is to sign the enclosed post card and mail it. We shall then give you the full details of our system—the system that writes sales-letters that are sales-getters.

A stroke of your pen and you will have opened the way to increased business and prosperity—bigger sales.

Very truly yours,
THE UNIVERSITY CORRESPONDENCE COMPANY.

CHAPTER XI

FOLLOW-UP LETTERS

93. *General suggestions.*—If the first letter produces no result it is frequently desirable, after a certain length of time has elapsed, to send a second. A third and even a fourth may follow. The policy of business houses in regard to the number of follow-ups varies a great deal, but usually not more than four are sent except in cases where the profit is large on each sale. In all cases the follow-up attempts to renew the desire that has already been created for the thing to be sold, and by giving new material increase that desire until it is strong enough so that the “prospect” orders.

The general procedure is to refer briefly to the fact that a letter has already been sent him, to which he has not replied, and to reiterate even more briefly the arguments that have been given; then to add new arguments and evidence, and finally to urge a prompt order.

94. *Bad beginnings.*—The beginning of a follow-up is always a delicate matter. It is necessary to give some reason for sending it. A frequent but undesirable way is to suggest that the first letter was not received, as in the following instance:

DEAR SIR:—

Some time ago we sent you a letter regarding our improved Dustless Sweeper, but as we have had no reply we suppose the letter went astray.

The old dodge—"possibly the letter went astray"—is so hackneyed as to be useless, particularly as it is palpably untrue. It is far better to recognize, at the outset, that the prospect was not sufficiently interested. But this should not mean that he is necessarily stupid or blind, and it is fatal to imply either, as the following beginning does.

DEAR SIR:—

Some two weeks ago we sent you a copy of our booklet, "Safety in Saving." We also wrote you a letter about saving and investing money. Were you disappointed in our plan for saving? We judge that you were interested or you would not have taken the trouble to write for our booklet.

Perhaps you thought that there was some way to save money without earning it first. Some alchemy that turns things to gold? There are many people who will offer you investments for which they make these claims. They can't make good their promises and you can't afford to have anything to do with any "get-rich-quick" scheme, be it honest or dishonest. So far as you are concerned, it will surely turn out to be a "get-poor-quick" scheme.

Perhaps you expected more interest than $4\frac{1}{2}$ per cent. Experience is a hard teacher. Learn from the great money savers in New York, men and women who are making the very best use that they can of millions of dollars. They do not expect to get more than $4\frac{1}{2}$ per cent.

What is worse still, the above beginning suggests that the company has done a favor in sending the booklet that was requested, and attempts to intimidate the reader. This attempt is frequently made, and with a certain class of people may be successful, but the average business man is too enlightened at the present day to be seriously influenced by such an attitude. There is

no obligation conferred when a booklet or letter is sent a man on his request, and it is not worth while to suggest that having inquired he ought to buy.

95. *Good beginnings.*—Far better is the beginning that compliments the reader on his wisdom in wishing to examine a proposition thoroughly before he accepts it. The following is a good example of this kind. For that matter, the letter is good throughout.

DEAR SIR:—

When we sent you our catalog, a week or so ago, there was so much that was new and interesting, we hardly had room to tell it all in one letter, neither can we expect you to realize all the advantages of "Come Packt" sectional furniture on first thought.

Because our plan saves you nearly 2-3 the cost, don't get the idea that there is anything cheap about our goods. We make a profit on every sale (about the same that the ordinary manufacturer makes when selling to the jobber)—*BUT* there's just that ONE profit; you pay not a cent for commissions, wages, rents, etc.; *not one penny for the things that add only to cost* and not to the value of the furniture. We make a specialty of this one kind of furniture; we are equipped to make it as economically as possible—this saves money for both of us. We KNOW that you can't get better furniture, no matter what you pay.

Look at the grain and beautiful flake in the wood we use. Not plain sawed oak, which is cheapest; not red oak, which is most commonly used—nothing but *Quarter Sawed White Oak*; it is so handsome, even before staining, that one man writes me, "he hates to touch it." I wrote him, of course, that our stains would *bring out* the exquisite flake, the delicate grain, and add a lustrous finish to the furniture. If you could see some of the wood used in common factory furniture, before it is doctored up, there would be no need of explanations.

"Come-Packt" sectional furniture is honest all through—no chance for us to conceal defects or patch up flaws—no chance to disguise chestnut and other cheap woods to "look like oak," as can be done with finished furniture that you get at the store when (by paying the price) you do get genuine oak, it may be red oak—it may be plain oak, but it is rarely Quarter Sawed *White Oak*, such as we use exclusively.

As to "Come-Packt" prices, they speak for themselves. We have put up the strongest possible guarantee on our goods and we repeat—if you are not perfectly satisfied with what we ship to you, we will refund your money and freight charges. We are expecting to hear from you most any day.

Very truly yours,

THE COLONIAL MANUFACTURING CO.,

J. BLANK, *President*.

No one method, of course, is good for all cases. Novelty and originality of expression, desirable at the beginning of every letter, is desirable especially at the beginning of a follow-up. But it should always be courteous, and should rather compliment than insult a man's intelligence.

96. *New material*.—The material that is given in the middle of the letter must justify the existence of the letter. Simply to remind the reader of the existence and the desirability of the article is helpful, but not enough. There must be new arguments, new facts, concrete, tangible facts.

The nature of this material varies according to the number of letters that are to be sent. It is well not to attempt to do too much. Concentration is as valuable here as elsewhere. Moreover, to strike hard upon one point instead of scattering your energy among several will enable you to present something new if another letter becomes necessary.

Following this principle, the first letter may contain some new appeal to the reason. The article advertised must be most efficient because of its smaller number of parts, which causes less friction. Or it may be most durable because of its heavier weight. And so on. When you have finished, the reader will say to himself, "Yes, that sounds reasonable."

The second letter may concentrate attention entirely upon evidence in the form of records, comparisons, etc. It is pointed out that the Jones typewriter was used by the winner in three national speed contests, that machines built ten years ago are still in constant use without having been rebuilt, that the sales increased 30 per cent in the past year, that they are used by more public stenographers than any other make, and so on. A letter of this kind can be made very effective.

A third letter might give the testimony of people who have invested and found it profitable. In this letter there may well be an urgent appeal for immediate action in order to get the benefits of the thing as soon as possible.

The fourth letter, if there be one, should deal largely with the question of expense, as it may be assumed that if the earlier letters have not created a desire for the article, this cannot be done. Stress should be laid upon the idea that the thing is an investment, not an expenditure, and that it will mean a money return. The reader should be made to feel that he can make no better use of his capital than by purchasing.

Sometimes a special concession, or a free trial offer may bring results. This, of course, is the last word in the argument. If the prospect does not yield to that, there is no use in sending further letters.

Success often comes from a clever letter rather than

a meaty one. A good story, well told, a neat little appeal to a man's sense of humor, occasionally yields returns where facts fail. But ordinarily forceful presentation of the merits of a proposition is the way to get sales. Advertising schemes are infinite and originality is always at a premium, but in the long run merit wins.

97. *Ending*.—The ending of a follow-up is extremely important, but it involves no new principle. The main thing is to close when you have given the prospect a strong desire for the thing and opened the way for him to obtain it. It should leave him with the idea that he is not being urged to come into a thing for the sake of what you can get out of him; neither should you imply that you are doing him a favor. It should be sincere and straightforward, the attitude of man to man.

98. *Examples*.:—

GENTLEMEN :—

Our letters to you have thus far brought no response. This surprises us, because our proposition is one that increases your sales. It is universally admitted to-day, that increased sales is increased profits. This being the case, you are disregarding a proposition that increases your profits.

Our "SALES-LETTERS ARE SALES-GETTERS" for the simple reason that they are written by specialists. You are supreme in your line of manufacture, because you make a specialty of one article. We are supreme in our field of correspondence, because we make a specialty of SALES-LETTERS. If we were to engage in general business correspondence, we could not do so well; nor could you, if you were to manufacture sundry articles. Therefore, our mutual success is due to SPECIAL-IZING.

The following firms of your city use our sales-letters: The Brooks Machine Co. give us credit for a \$10,000 sale of

stock; Messrs. R. White & Co. say that their sales have increased 20 per cent.; while Messrs. Barnes & Moore write us that we have increased their sales 25 per cent. Let us increase YOUR sales.

Delay no longer. Let us do instead of say. Complete and mail to us the enclosed blank, and we will DO what we say.

Very truly yours,

THE UNIVERSITY CORRESPONDENCE COMPANY.

DEAR SIR:—

Our business is the selling of correspondence service to business houses and then selling these goods by effective sales-letters. We are successful in selling other people's goods but for some reason do not seem to have interested you in our proposition. What is the reason?

Messrs. R. H. Stiles & Co. wrote us last week as follows:

“Six months ago we gave you a trial order just to give ourselves the satisfaction of witnessing your failure. Our correspondence department is a strong one and we could not see how you were in position to make good your claims. You have written all our sales-letters for the past three months and that failure is somewhere off in the future unless it has died of disappointment. We have been too busy filling orders to look for any trace of it.”

Messrs. R. H. Stiles & Co. stand for conservative business methods. You would not expect them to be interested in any fly-by-night scheme. This is why we are especially proud of these few words of praise.

You probably feel as they did regarding the fitness of our service for your business. Why not follow their plan and try us on a make-or-break basis? Forty trained men will assail your selling problem with vim and energy. The walls of Jerusalem fell before a Hebrew band equipped with faith and a few trumpets. If we turn our band loose in your cause, faith and energy combined with special training and experience will jar your competition to the ground.

Your proposition lends itself especially to our plan and for this reason we risk being considered insistent. Give us a fighting chance to make money for you. Send samples of your sales-letters, advertising matter, anything to show that you are interested and we will show you the first few moves in our campaign for the success of your business.

Very truly yours,

THE UNIVERSITY CORRESPONDENCE COMPANY.

Following is a series of follow-ups for a typewriter. The original sales-letter was accompanied by a booklet.

I

DEAR SIR:—

It *does* seem rather extraordinary at first sight that we should be offering you a full size standard typewriter for \$50—half the usual price.

It takes *time* to let an idea like that sink in. It sounds too good to be true.

But it *is* true. The King typewriter is not a baby writing-machine. It is a full-sized typewriter, of the most up-to-the-minute pattern, with every improvement that can be found on any standard make—and some others.

It has visible writing and this, notice, is not on the top nor on the side of the roller, but half-way between, just where the eye can read it most naturally.

No other machine has this feature.

It is durable. Every part is well made and finished. There is no cheap job-work in it. The type-bars are made of a specially-hardened steel that is rigid and tough.

But we cannot attempt to enumerate all the good features. You must use it to appreciate them.

How can we make this offer? There are three reasons.

We make every part of the machine in our own factory.

We have simplified the construction and thus reduced the cost of it.

We are selling four times as many machines as any other maker.

You don't have to take our word for it. We will return your money if you are not satisfied. Sign the enclosed card and the machine will be delivered to you immediately.

Very truly yours,

THE KING COMPANY.

II

DEAR SIR:—

When you buy an ordinary typewriter, you pay \$50 for the machine and \$50 for the name. The name is worth *something*. It is a guarantee of quality.

But why pay \$50 for it when we will give you a better guarantee of quality free. We agree to keep the machine in repair for two years, or replace it if it does not give satisfaction. Our factory has been in operation a year, and not a machine has come back yet.

In two years more the King will be synonymous with typewriter. It will be the best-known *name*.

Our sales in the past month were double those of the previous one. Since we wrote you ten days ago we have sold over three hundred machines. We expected that.

But we want to do better in the next ten days. We want to sell five hundred. That is the reason we can sell so cheaply—we sell directly to you, and our profit is small.

We have such confidence in our machine and in your judgment that we are going to make you this special trial offer.

Let us place one of these machines in your office. Use it ten days. If you can spare it at the end of that time we will take it away and it will not cost you a cent.

If it satisfies you, take the \$100 that you would ordinarily spend for a typewriter, and give us half. Put the rest back in your pocket. It is clear profit to you.

Could any proposition be fairer?

Sign the enclosed card to-day.

Very truly yours,

THE KING COMPANY.

CHAPTER XII

ARGUMENTATIVE LETTERS

99. *Solving particular problems.*—When a man has become interested in your proposition the battle is half won. If he answers your letter, but does not purchase, you at least know where he stands, and how best to deal with him. This is especially true if he expresses some definite objection or makes some further inquiry. If you can meet his objection and overcome it you can make a sale.

Therefore, in order that these near-sales may be converted into cash it is necessary to know how to use argument effectively. In some respects the purely argumentative letters resemble the sales and follow-up letters. But these are directed to a large class of people, not to a single individual. They cover a broad territory. In an argumentative letter, you are trying to solve the particular problem of one man. You are trying to meet *his* needs, and show *him* that he cannot afford to neglect the proposition you offer.

100. *Minimizing the objection.*—Frequently you may show that his objection is really due to misunderstanding—your fault, of course, in failing to explain more fully your proposition; and then you proceed to show that really it is particularly adapted to his needs.

In no case should you suggest that he has misunderstood you because of his own carelessness or stupidity. An example of this fatal kind of discourtesy is the following:

DEAR SIR:—

You have evidently misunderstood our proposition. We do not claim that the material we put into our \$50 money-changer costs us that. We offer you \$5 worth of metal and \$45 worth of brains, and a man who would rather have \$45 worth of metal and \$5 worth of brains is just the man who needs all the brains he can get.

This idea is good enough, but the way of putting it would antagonize almost any human being.

101. *Meeting the objection.*—It is best to avoid, if possible, the idea that there is really a very strong objection to be met. But sometimes there is a real issue. In such a case, begin by agreeing that he has reason for his position, and saying that you would probably feel the same way in his place. Then define the issue as sharply as possible. Make it a yes or no question. Help him to answer it.

Frequently a good way is to show that the objection itself is, after all, unfounded. It is based upon a generalization from too few facts, or he has ascribed a wrong cause for the effect he has observed. Or if he has the testimony of others against the proposition, possibly their testimony was incompetent or biased. Expose the fallacy of his reasoning; break down the objection. Then you can give new truth in its place.

One of the most frequent objections is: "I have tried something of the kind, and found that it didn't pay." Such an objection may be answered by showing that there are really great differences between this article or proposition and the others that seem to have some similarity. The resemblances are on the surface; the differences are underlying and essential.

The prospect says, for example, that advertising does

not pay. You show that some kinds probably do not, but that the right kind does. You then prove to him that yours is the right kind for his purposes, because it will reach the class of people he wishes to interest. You back this up by evidence that it has done so for other men in his line of business. It is especially helpful to tell him that many of these were at first sceptical about the value of the proposition, but gave it a trial and were convinced.

The objection that he can't afford it, may be met with the argument that it is an investment that will result in added profit. Frequently the very reason he alleges for his inability to buy may be turned to your profit. For instance, he says he cannot advertise because he is spending a great deal of money on alterations and additions to his plant. You argue that this increase in the capacity of his plant will be useless without the increase of business which can be obtained by advertising. He can't afford insurance? He must be made to realize that the future of himself and his family is equally as important a matter as the present.

Whatever the arguments, they must be backed by good evidence, in the shape of facts. Whether the urging at the end be repeated or not depends upon the character of the prospect. The psychological command may easily be overdone. If you have used it once with him do not repeat it; instead, seem to leave the matter open to his judgment, confident that he will make the right decision.

For further help in the work of writing letters of this sort, a man should study the science of argumentation.

102. *Examples*:—

March 8th, 1909.

Mr. W. P. Smith,
Hoboken, N. J.

DEAR MR. SMITH:—

We appreciate the stand you take in your letter of March 16, and agree with you when you say that our proposition is a fine one for the beginner, the promoter, etc. We will also take your side when you say that your letters have brought good results. But we want to convince you that we can get better results for you.

As a general rule it is true that a certain amount of technical knowledge is necessary to sell any article. This last statement is particularly applicable when you start out to sell such a thing as life insurance, machinery or any other proposition that is not standardized by long usage and well understood by the people whom it is sought to interest.

We have not tried to get any life insurance companies or machinery manufacturers as our clients for the above reasons. Your edge tools are known to every hardware jobber in the Eastern States. Do you sell to all of them? Not quite, and a lot of those who are not your customers are worth getting, are they not? They will yield to a systematic campaign. The persistent and systematic salesman makes the best showing among jobbers but it will not pay you to keep a man traveling after your hard cases. It will pay you to have us write them letters if we can get any reasonable amount of results and we can.

We took charge of the Dowden Powder Co.'s dynamite and nitroglycerine sales in the Rocky Mountain States a year ago (these lines are sold to hardware jobbers and general storekeepers) and while we do not feel that we are at liberty to give out the figures we have as to the increase of sales and reduction of selling expense we are sure that the Dowden Co. will not refuse to give you the information. Write and ask them.

Now then we have made a success of selling explosives for

the Dowden Co., horseshoe nails for the U. S. Horsenail Co., pipe for A. M. Bayres & Co., and paint for the Kansas Paint Co.

We have added customers to their lists whom they could not get themselves. Then why can't we get a chance at enlarging the sales of your edge tools.

Very truly yours,

THE UNIVERSITY CORRESPONDENCE COMPANY.

DEAR SIR:—

We are not surprised at your conclusion, as expressed in your letter of February 25. Ninety-five per cent of the letters we receive from reputable houses who do not accept our proposition immediately raise the same objections.

Recently we prepared a statement showing the number of inquiries we have received during the past five years relative to our proposition. Eighty per cent of the inquirers are now our customers, and we solicit business only from the best houses in their respective lines of trade.

You believe your business requires a technical knowledge that cannot be gotten outside of your line. Our staff is made up of forty experts in sales-letter writing, and by an actual canvass of our force we find that we have five men who made a separate study of mechanical engineering. We think, therefore, that we have the necessary technical knowledge.

Now, as to your statement that we may be able to do well for beginners, investors, etc., but are not likely to be able to help an established business, we would call your attention to the following instance of our ability in making sales.

Last August we tried to interest the Blank Motor Company in our proposition, but they, like yourself, had a large and competent staff of salesmen and sales-letter writers, and did not care to change their system. In October they wanted to extend their business so as to take in several countries in South America, but could not find a man that could write a letter in Spanish that was satisfactory to them. They called us in and gave us a

contract to write their foreign sales-letters. Their experiment was so satisfactory that they gave us a trial on their domestic sales-letters writing, and on January 1, 1909, they signed a contract with us to write all their sales-letters for the next two years. The president of this company, Mr. Smith, told us recently that they are saving almost \$5,000 a year in salaries since they adopted our system. You might 'phone Mr. Smith and verify this.

We have been successful for other people and we will be successful for you. Practically every customer we now have, when writing us first, stated, in effect, that he was "from Missouri," and we have shown him. Let us show you.

Very truly yours,

THE UNIVERSITY CORRESPONDENCE COMPANY.

CHAPTER XIII

LETTERS TO SPECIAL CLASSES

103. *To farmers.*—So far we have considered letters as written to business men only. In them the tone is that which would be used to one of the writer's own class. But as not all letters are written to men who are engaged in commercial work, it is worth while to see what differences should be made in a letter written to a person in some other walk of life.

In writing to a farmer or an artisan or a lady, you certainly would need to use a different style from that which you use in a letter to a business man. For that reason it is worth while to consider some of these special classes, and see how they may be appealed to most effectively.

In writing to a business man, *Conciseness*, as we have seen, is a very important quality. A business man's time is limited, and he receives a great many letters. Therefore he wants the matter in a nutshell. This is not the case with the farmer. He receives less mail, and a letter is to him a very important matter. He is pretty sure to read the whole thing, no matter how long it is. And the longer it is, the better he is pleased, as a general rule. The mere bulk of it impresses him, and leads him to give the matter careful consideration. Moreover, he is likely to be slow to make up his mind. A short letter would not give him the time he needs to make his decision. For all these reasons, then, the letter to the farmer should be long. It need not be boiled down to

the bare essentials; it may well give the most trivial details.

But the farmer is usually of a practical nature—he is “canny” as the Scotch would say. For that reason, the same kind of material that would appeal to the business man should be given him. The mistake is often made of putting a great deal of “hot air”—mere effusive praise—in a letter to a farmer. It will influence him no more than it would the average business man. Facts are what he wants, solid, concrete facts. If you are trying to sell him a mowing-machine, give him the record of its achievements, and give him plenty of testimony about it. Show how it is better than any other machine of its kind, down to the smallest cogwheel.

Of course, a great deal of the material can be given in the form of a booklet. Illustrations are especially helpful. The mail-order houses make good use of this means. In general it may be said that too much cannot be written in communications to the farmer, provided all the material is of practical nature and is put in concrete form.

104. *Example.*—An example of a good letter to a farmer follows. It might be longer, and gain in effectiveness. It should be accompanied by booklets, pictures, and other illustrative matter.

DEAR SIR:—

You have found in your experience, that progress often means discarding the old ways and adopting new. You have made the farmer the most progressive man of to-day, by adopting every new help of proved value.

Have you ever investigated the merits of the Jones clothes dryer? We enclose a booklet describing them, and giving full details of styles and prices. They are a very big step forward in the march of progress.

Undoubtedly you realize the many disadvantages of the old-fashioned rope lines—the long paths in the snow that must be shoveled, the tramping in the wet grass, the aching arms and lame back from excessive reaching, and, lastly, the disfiguring swinging lines, left out in all kinds of weather quickly deteriorate.

Our “Champion” clothes dryer is very compact, the largest size covering a radius of less than fourteen feet, yet having a capacity of 100 to 150 feet of line; it is unnecessary to shovel long paths in the snow or walk in the wet grass, for by swinging the reel in either direction, vacant or filled line, as you prefer, is brought within easy reach.

While it is perhaps premature for you definitely to place an order for one of our “Champion” dryers, we trust that you will carefully consider the merits of our “Champion” and at your convenience, permit us to quote our special prices.

Yours very truly,

THE JONES DRYER CO.

105. *To ladies.*—Letters to ladies, like letters to farmers, may profitably be fairly long. But otherwise there are very great differences. The tone of the letter is of far more importance than the material. This tone should be one of extreme courtesy, and scrupulous, formal politeness will not be amiss. Ladies are more accustomed to social than to business letters and are therefore more easily reached by letters that are similar to these in tone.

In that connection it is worth while to mention the fact that business letters to ladies may be advantageously be written upon stationery similar to social stationery, rather than on the regular eight-by-eleven sheet. Some firms even have the letters written in pen and ink rather than on the typewriter.

These devices no doubt help, but the most important thing is the language itself. This should be correct and even precise. Colloquialisms should be avoided. Long words, with the literary flavor, are often desirable. In fact, a letter to a woman is most likely to be successful if it appeals to the æsthetic rather than to the business sense.

This principle applies to the matter as well as to the manner. Facts are necessary, but they should be stated clearly and simply. No argument or appeal to the reason is usually worth while. Women are usually far more likely to be influenced by what someone else is doing, than by what is most advantageous from the practical business standpoint.

In this connection we may quote Sherwin Cody:

It is my observation that women are largely influenced by what everyone believes, by the sentiment in regard to an article that pervades the air. The first time a thing is announced, a woman is not likely to jump at it. She wants to wait and see if anybody else is going to get it. When she begins to feel that all the world is after it, she will join in the rest. The individual woman, too, is peculiarly susceptible to the repeated appeal, if it is light, fresh and tantalizing rather than boringly persistent.

It is particularly important not to seem too urgent in your efforts to secure a sale, and let her take her own time about deciding. But give her plenty of material to work upon and let her feel that she may be sure of receiving prompt and courteous service in her dealings with you.

106. *Examples.*—The following letter illustrates something of the right kind of tone in a letter to a woman.

*Mrs. Catherine Vander Clute,
5560 Riverside Drive, New York City.*

DEAR MADAM:—

Allow us to express our appreciation of the courtesy shown our Mr. Wellman on the occasion of his interview, at your home last Thursday with reference to the purchase of a Burch-Orpheus player-piano. Mr. Wellman advises us that you derived much pleasure from the use of one of our instruments at the Hotel St. Regis last summer, but wish to convince yourself that no other player possesses qualities equal to those of our masterpiece, the Louis XIV Art Nouveau piano.

There are a number of improvements which have added to the value of the Burch-Orpheus with which we think you are unfamiliar. The melodant gives perfect control of the theme which runs like a thread of gold through so many of our standard compositions. Any cultured person can express more individuality and better interpret the true meaning of the master mind by the use of the melodant in connection with our phrasing lever than is possible even to great musicians, except by long study and arduous practice of a single section. The player mechanism eliminates the strain and fatigue incident to the actual execution of the composition and leaves you free to express your own conception of the composer's meaning.

As the instrument will tell you what written words cannot, we are very anxious to have you hear an artistic rendering of some of your favorite classics. Professor Ignatz Spondilowitz appears before the elite of New York's music-loving society at Carnegie Hall next Friday afternoon for the first time and includes on his programme three selections on the Burch-Orpheus. We sincerely trust you will pardon the liberty we are taking in enclosing two tickets to this recital. If you have no important engagement for the afternoon we believe you will enjoy the concert and also arrive at a better understanding of the possibilities of the one player piano which represents the supreme effort of twenty years' artistic endeavor.

Mr. Wellman mentioned that your time was limited at the time

of his call and that opportunity was lacking for a complete explanation of the latest improvements in construction and tone quality. May we have the pleasure of showing you the several styles in our Art Room or would you prefer that Mr. Wellman should call again?

Respectfully yours,
THE BURCH PIANO COMPANY.

It will be noted that the sentences here are longer and the words rather less simple and common than in letters that have been given earlier. The paragraphs, too, are longer, and in general the letter seems as much of a social as of a business nature.

DEAR MADAM:—

The old-fashioned method of sweeping is by the use of the broom. Sweeping is supposed to mean the complete removal of dirt and dust from the floor. The broom does not do this. If it does remove the dirt, why is it necessary for you to send your carpets and rugs to the cleaners each year?

Then, again, after your servant has done her so-called “sweeping”—for sweeping it is not, as the dirt is really scattered—she must “dust.” That operation sets in motion the dust that has fallen upon the furniture after the “sweeping,” and the dust finally settles down upon your furniture, bric-a-brac and carpets, where it originally lay. Thus, you pay your servant
• for making work.

Not only does your servant waste her time “sweeping” and “dusting” and not only is your furniture scratched and marred, and your bric-a-brac broken, but a worse evil is brought about—that of circulating and infecting the air with germs. Science proves that tuberculosis is caused in not a few cases, by the present unsanitary method of sweeping.

Our invention, the Vacuum Cleaner, remedies the evil. Instead of *scattering* the dust, it *consumes* the dust. Your servant is not required to dust after sweeping. You are not re-

quired to send your carpets to the cleaners. You can reduce your help, and preserve your health by the use of the "Cleaner."

It would give us great pleasure to demonstrate our cleaner in your home, and if you will mail the enclosed card, we will satisfy you.

Very truly yours,

107. *To professional men.*—Letters to professional men and men of leisure may have something of the same ultra-courteous tone and literary character as those to ladies, but they should usually be shorter. Where a woman is flattered by a long letter, as indicating a desire to give her special attention, a man is flattered by a short one, as indicating that he is too busy to read a longer. Moreover, more stress should be laid upon the merits of the proposition than upon what other people are doing. In other respects the letters are similar to those to ladies.

The following is a good example:

DEAR SIR:—

In all matters a diligent preparation should be made, but particularly in travel do those who pave the way well before leaving home derive the greatest enjoyment, comfort, and education from their wanderings in foreign lands.

Properly to make such preparation requires a knowledge of foreign countries and above all things an experience in foreign travel. Even an inveterate "globe trotter" will often find himself face to face with unforeseen difficulties and will be constantly harassed by the many petty details incident to independent travel. Business men in every line, before embarking in any new enterprise secure the services of experts and the man who is wise will, before he sets out upon a foreign tour, obtain the advice and assistance of those who have for years made a specialty of foreign travel. And if he can find united in one single company an organization thoroughly experienced in ocean

and land traveling and perfectly equipped to have charge of him from the moment he leaves New York until his return, he is doubly fortunate.

The Pan-American Line, by the introduction of many innovations in the construction of their magnificent passenger steamers, the operation of many connecting services, and the acquisition of a well-organized tourist department for land excursions, has done much to relieve the tourist of all annoyances and inconveniences, and to enable him to travel as care-free as possible, thus winning for itself an enviable reputation and a liberal patronage.

The purchasing of railroad tickets in Europe, particularly when one is not familiar with the language of the countries visited, has often been found the cause of annoyance and delay. To relieve the tourist of this inconvenience our company has arranged with the European railroads for the issuance of tickets for such transportation in this country, so that one may, before leaving home, arrange for the railroad transportation and purchase the final tickets which will be honored by the conductor of the train used and require no exchange. Besides the convenience afforded by purchasing the tickets from us, the *cost of these circular railroad tickets is about 25 per cent less* than the tickets purchased from place to place.

The enclosed booklet contains fifty suggestions for independent tours. Tickets for hundreds of other trips can be issued by us, and if you will inform us of your itinerary, we shall be pleased to furnish you further information.

We hope that by permitting us to arrange a tour for you, you will afford us an opportunity of demonstrating to you the truth of our claims regarding our system.

Yours very truly,

PAN-AMERICAN LINE,
Cabin Department.

CHAPTER XIV

OFFICIAL LETTERS

108. *General rules.*—There is one class of business letters, which differs in most respects from those which have previously been considered, and which may conveniently be called “official letters.” They are used by government officials, members of a firm, officers of a corporation, and the like, in writing about matters that lie outside the scope of regular business. These are sometimes matters of importance to the firm or other organization, but frequently are of purely personal value. Letters to these members or officials would belong to the same class. Examples would be a letter that asks a business man to act as a member of some committee, one that asks his advice on some question, answers to such letters, and the like. In fact, any letter that is written by or to an official or a business man on any other questions than those which come up in the regular routine of business, may be considered as an official letter.

The stationery on which official letters are written usually differs from that used for other business letters. It is most frequently smaller in size, of folder form, and similar to social stationery. A small letter head is frequently used. This contains usually only the name, official position and address of the sender—sometimes only the address. Usage is at present to have this on what is ordinarily considered the back page of the folder. This is of course the first page to be

written on. If a second is necessary the other outside page is used. Examples of stationery for official letters are reproduced on another page.

Official letters fall naturally into two classes: the formal and the informal. They differ so widely in tone and construction that they may best be examined separately.

109. *Formal*.—Formal letters are those written to government officials, members of Congress, officers of the army and navy, and others in high positions, and generally to all business men except those with whom the writer is on a footing of friendly familiarity. The letters written by these individuals are likewise formal.

The mechanical form of these letters differs from that of other business letters. The inside address is written at the close of the letter at the left-hand side. In it all titles are given in full. No abbreviations should be used. As correctness is so necessary, it is worth while to give a brief explanation of more common titles.

110. *Use of titles*.—The titles *Reverend* and *Honorable*, and the foreign title *Sir* should be used with the first names unless Mr. is included, as *Reverend Samuel Jefferson*. When used in the body of a letter, *the* should precede the title, as “the Honorable James Gordon will address the meeting,” or “the Reverend Mr. Knox hopes to be present.”

With the title of *Doctor* or *Professor* the first name may or may not be used, according to choice.

Under the laws of the United States no fixed titles are attached to any of the federal officers. Certain rules have been established by custom which should be followed.

The President should be addressed *The President*.

A governor or mayor should be addressed *His Excellency the Governor* and *His Honor the Mayor*, or, as well, *Honorable John A. Fort, Governor of New Jersey*.

All judges and justices, with members of Congress and members of state legislature are entitled to *Honorable*. Senators of the United States are usually addressed as *Senator Elihu Root*, or *Honorable Elihu Root, United States Senate*, if the Senate Chamber is used as the destination of the letter.

Members of the House of Representatives are addressed *Honorable Nicholas Longworth, House of Representatives*. In state legislatures the same usage prevails.

Any titles are written out in full, however long they may be, as *Lieutenant-General*.

The titles *Superintendent, Agent*, etc., are written after the name, as *Mr. John Stuart, Agent*. Honorary degrees, likewise, follow the name and are, unlike titles, abbreviated generally, as *D.D., LL.D.*, etc.

The salutation is usually *Sir*. The complimentary close is *Respectfully* or *Very respectfully*.

111. *Examples of formal letters*.—In the body of the letter, the strictest formality is observed. No abbreviations or colloquial expressions are permissible. Very frequently the third person is used throughout in speaking of the writer. The language is stately and dignified to the point of coldness.

The following is an example of the formal official letter:

April 1, 1909.

SIR:—

At a meeting of the Wholesale Lumber Association of Greater New York, held on March 30, 1909, it was resolved that:

“The reduction of the tariff on cut lumber proposed in the Payne tariff bill is against the interests of both the American dealer and the workingman, and we call upon our representative in Congress from this district to do all in his power to have this section stricken from the bill.”

In accordance with the above resolution, we, the Wholesale Lumber Dealers' Association, representing all the firms engaged in this business in your district, and the employés of five thousand of your constituents, ask that you do all that you can in eliminating this clause.

If this clause is allowed to remain in the tariff bill, it will paralyze the cut lumber industry, cause thousands of workmen to lose their livelihood, and enable foreign cut lumber dealers to undersell us in our home markets.

Trusting that you will see the necessity of strong action on this clause, we are,

Respectfully,

THE WHOLESALE LUMBER DEALERS' ASSOCIATION.

By JOHN P. MORRIS, *Secretary*.

Honorable Timothy D. Sullivan,

House of Representatives, Washington, D. C.

112. *Informal*.—In letters between business men who are on terms of familiarity with each other it would be absurd to use the stilted formal style. For these letters (assuming that they lie outside the routine of business) a very informal conversational tone is desirable. The informal official letter is in fact the exact antithesis of the formal. It has character more than any other quality, whereas the formal letter is distinguished chiefly by its lack of character.

In fact, it is hardly too much to say that the only requisite in the informal letter is the touch of personality. For that reason there are almost no rules to be laid

down for its construction. Like the ordinary personal letter, it may be of any form that the writer chooses—he is at liberty to please himself.

The salutation is usually *Dear Smith*, or *Dear Mr. Smith*, or *Dear Jack* or anything else the writer pleases. The inside address, if used at all, is placed at the end as in the formal official letter. The complimentary close may be *Sincerely*, or *Cordially*, or *Faithfully*. Others are frequently used.

In the body of the letter the writer need not trouble himself to be correct or concise. Clearness is easy to obtain, and courtesy is natural. Character is the only quality the writer has to concern himself with; he should aim to give the letter the stamp of his own personality.

113. *Examples*.—The following are examples of the informal official letter:

December 1, 1900.

MY DEAR PROFESSOR JONES:—

I will have the printer send you two proofs of your articles and revises whenever you think necessary. I will have him also follow copy as to spelling, although in giving this instruction I shall feel a little as I should if I were to ask Delmonico if I might bring a friend to dinner in flannel shirt and moccasins, said friend being bent on simplifying modern attire and preventing the enormous waste of time which it compels.

The body of your articles will be set in ten point, and the tabulated matter in eight point. We shall be glad to have the copy as early as possible in order that we may all have plenty of time to go over the proofs.

Sincerely yours,

JAMES ELLIS,

Professor Frank E. Jones,

University of Peckskill, Schenectady, New York.

November 1, 1909.

DEAR MR. FRANKLIN:—

Your careful investigation of the leakages in our supply department, which has resulted in a monthly saving of several hundred dollars to the company, was very warmly commended at a meeting of the directors to-day. I am asked to express to you our appreciation of your work.

As a slight token of this appreciation we are advancing your salary to \$320. This, you will understand, is not simply a reward for this particular service. It is rather an attempt to give due recognition to your ability and industry.

May I add that I feel personally gratified at the record you have made.

Very sincerely,

THOMAS GRAVES.

Mr. Edward Franklin,

The Carnival Key Company, New York City.

CHAPTER XV

PUNCTUATION AND COMMON ERRORS

114. *Comma*.—Since punctuation is only valuable in serving to make the meaning of a sentence clearer, it is a safe rule to omit marks wherever they are unnecessary to clearness. A few principles only will be useful in regard to the various marks.

The comma is used to separate words or groups of words that are distinct from each other and would be in danger of being confused if some marks of separation were not used.

Thus a word or group of words that is parenthetical or merely explanatory is set off from the main body of the sentence by commas.

Words out of their normal order in the sentence are usually set off by commas.

Modifying clauses or phrases, except when restrictive, are set off by commas.

115. *Semicolon and colon*.—The semicolon may be regarded as an intensified comma; that is, it marks a wider separation. Ordinarily it is used to mark the separation between clauses, rather than between less important groups of words.

The colon may be regarded as a mark of equality: what follows it has approximately the same meaning as what precedes, but is expressed differently. When words are used that express equality, as *that is*, the semicolon is employed instead of the colon.

116. *Period*.—The period is used after every complete declarative or imperative sentence.

It is also used after every abbreviation.

Of the interrogation point, exclamation point, the use of brackets and parentheses and dashes, nothing need be said. The proper method of using them occurs instinctively to most writers.

117. *Words often misused*.—Following is a list of words which are commonly misused:

Ability—Capacity—A man has capacity to receive knowledge, and ability to use it.

Above—"More than a dozen were sold," not "above a dozen."

Accredit—Credit—A general "accredits" a messenger by giving him letters of credit or credentials. By believing a man we "credit" him.

Among—Between—"Between" refers to two only, "among" refers to several, as "divided between John and Edith," "divided among the four children."

Aggravate—Wrongly used for "irritate."

Alike—"The knives are alike," not "both alike."

A while since—Rather "a while ago."

Avocation—Vocation—"Vocation" refers to one's chief employment, "avocation" to a side calling.

Bring—Fetch—Carry—We "bring to," "carry away" and "fetch." The last combines both "go" and "bring."

Beg to acknowledge—Overworked in letter writing, and not correct.

Coöperate together—"Together" is superfluous.

Calculate—Improperly used in "I calculate it is right," for no calculation is involved.

Credible—Creditable—Different words. "Credible" means believable. "Creditable" means worthy of praise.

Disagree—Generally followed by “with” instead of “from.”

Directly—Often misused for “as soon as;” as “directly the train stopped we alighted.”

Either—Refers to one of two. “Any” or “anyone” refers to several.

Equally as well—Leave out one word; say “equally well” or “as well.”

Expect—Incorrect in “I expect the money was stolen.” One cannot expect in the past.

Financial—Used only of large money matters. To be distinguished from “monetary” and “pecuniary.”

Generally—Distinguished from “commonly,” “usually” and “frequently.”

Guess—Too often misused for “think.”

Had ought—“Ought” is never used with an auxiliary. “I ought not to have done that.”

Hardly—“I can hardly,” not “I can’t hardly believe it.”

In respect to—Never say “in respect of.”

Locate—Often heard as an Americanism for “settle,”

Majority—Plurality—In our political system a candidate for office does not have a “majority” unless he has more than half of all the votes cast; a “plurality” is an excess over the next highest.

More perfect—“Perfect” cannot be made “more perfect.” “More nearly perfect” may be used.

Party—A good legal term, but not a literary term as a synonym for “person.”

Permit—Allow—Words different in application; “allow” signifies tacit assent, “permit” indicates formal assent.

Plead—“He pleaded guilty,” not “plead” or “pled” guilty.

Politics—Always considered as singular.

Practicable—Practical—That which is theoretical is “practical,” that which can be done beyond question is “practicable.”

Proposition—Proposal—A “proposition” is something to be discussed. One makes a “proposal” to do something.

Same—Improperly used as a substitute for “it.” “Send me the book and I will return the same to-morrow.”

Seldom or never—Sometimes miswritten “seldom or ever.”

Since when—Incorrectly used for “since then.”

Those kind—Often heard but incorrect, since “those” is plural and “kind” singular.

PART III

TRANSPORTATION

CHAPTER I

INTRODUCTION

1. *Relation of transportation to industry.*—The business of transportation may fairly be regarded as among the most primitive of special occupations. The movement of persons and goods from one place to another was historically precedent to any considerable development of special manufacture in any one locality. Indeed in early times special exploitation of natural resources and special manufacture appear alike to have arisen in order to satisfy demands incident to external trade carried on by adventurous traders who were the primitive freight carriers. The pushing of transportation facilities beyond the actual needs and demands of the moment which was characteristic of early railway enterprise in America is thus not a new phenomenon.¹

The large part which the business of transportation plays in respect to business as a whole and indeed to human life as a whole, accounts for the almost infinite economic reactions to which it gives rise. Not even the state is so omnipresent as the railway, and certainly no

¹ The ancient trade routes were well established before there was any but the most rudimentary development of special industries. Primitive industry in a self-contained community must be miscellaneous. Special industries can only grow under the impulse of external demand promoted by some means of external transportation. Instances of this in remote times are to be found in the early trade of the River Dnieper and of the Persian Gulf.

one group of producers, however important may be their product, comes in contact with people directly at so many points as does the group engaged in transportation. This accounts to a large extent for the friction which has been at all times and nearly everywhere, generated between those who transport and those whose persons or whose goods are transported.¹

A special cause of friction in recent times is the somewhat anomalous position in which the railway company stands traditionally in relation to the public. The railway company renders what is after all the most important of the public services; yet it is a group of private persons, not of state officials; its capital is subscribed by people in all parts of the world and the state is not in any way as a rule responsible either for the return of this capital or for the security of it. Yet the railway company is customarily looked upon as being amenable in some peculiar way to state control and to state discipline. This tradition and the attitude of the public mind to which it gives rise cannot be understood without study of the history of railway enterprise at least in a general way.

2. *Early public regulation in England.*—When railway enterprise began about 1830, almost simultaneously in Great Britain and in the United States, there was naturally, especially at the very beginning, no general realization of the enormously important rôle which railways were destined to play in the economical development of the world; and the interest of the public in the general course and in the incidents in detail of this de-

¹ The extortions of cabmen, watermen and the like, have been subjects of common jests in all ages. According to Chamberlayne, e. g. ("The Present State of Britain," London, 1743, Part I, p. 260) "Coachmen, carmen and watermen are for the most part rude, exacting and quarrelsome." Yet their rates were fixed by law.

velopment was on that account almost ignored.¹ The first railways in England were private lines used for conveying coal from the collieries to the "staiths" or coal shutes at the ports, chiefly Newcastle and Gateshead, both on the river Tyne.² These private lines undertook to offer no public service and were thus amenable only to police regulations. When in 1801 railway companies were projected to compete with canals and coaches they applied to Parliament for powers of expropriation. Although the granting of this privilege would have afforded ground for the imposition of regulations, the regulations were imposed in the same way and on the same grounds as the regulations imposed upon persons who came into relations with the public in similar ways.³

¹ Among those who foresaw with remarkable sagacity the future relation of railway construction to the public interest, there ought to be mentioned Dr. James Anderson, who, in a paper on "Cast-Iron Railways" ("Recreations in Agriculture," London, 1803, Vol. IV, p. 212), advocated national construction of railways from the beginning; and James Morrison, M. P., who advocated regulation in the public interest soon after they began (Speech in House of Commons, May 17, 1836).

² These were known as "waggon-ways." They were not on the public highway; but were situated on land owned by the collieries or upon land over which the collieries had acquired from the owners a right of way. They ran as directly as possible from each colliery to the river. They consisted of "rails of timber exactly straight and parallel" (Lord Guildford, writing in 1676). The origin of these "waggon-ways" is obscure. They were probably in existence for some time prior to 1670. The first ways of this kind noticed in Scotland were constructed at Prestonpans, for the carriage of salt, in 1719. (See Chambers' "Domestic Annals." Edinburgh, 1861, p. 472.) A considerable network of such lines is shown (in a map of 1812) leading from the collieries to the Rivers Tyne and Wear, one of the lines being carried in a tunnel. (See "A Picture of Newcastle upon Tyne," etc., Newcastle, 1812.) These lines were first constructed for horse traction and later for use by gravitation and by stationary steam engines. About the end of the Eighteenth Century the wooden ways appear to have been replaced by iron. Locomotives began to be employed upon them about 1814. (See Nicholas Wood, "A Practical Treatise on Railroads," London, 1825.)

³ The regulation of the rates chargeable by coachmen, carmen and watermen, as well as the regulation of the maximum rates which might be

The railways did not thus appear in any special category with regard to regulation. They were looked upon as highways and their use as such for vehicles appropriate to them was recognized and provided for in the earlier acts. There was nothing new in the regulation of highways. They had been subject to regulation from time out of mind. But the regulation was not yet of a very pervasive character. In 1830-40, when the early railway acts were passed, the country was under the full influence of the attitude of *laissez-faire*. The new movement for pervasive state control which was presaged by the early factory acts had not really begun by 1850.

3. *Early regulation in the United States.*—In the United States, on the other hand, where railways began to be constructed also about 1830,¹ the attitude of the public authority was different almost from the beginning, although not uniformly so in every state. Their general attitude was noticed at the time by Dr. Lardner, a popular writer on science who visited the United States in 1840-42. He remarks upon the material difference between English and American railway legislation as it struck him at that time: "Railways in America have been generally constructed, as in England, by joint stock companies, with which, however, the state interferes

charged on canals, afforded an obvious precedent. The highway acts went even further, for they prescribed the width of the tires of carts, the number of horses by which they might be drawn, and their weight. (See e. g., 14 Chas. II, c. 6, 1662.) The rates of London coachmen were prescribed e. g., in 14 Chas. II, c. 2.

¹ The first railway projected for public use by locomotive power and actually constructed is said to have been a line promoted by William James, from Stratford-on-Avon to Morton-in-the-Marsh. (See Smiles' "Life of George Stephenson," ed. London, 1858, p. 161.) The act for this railway was passed in 1821. The first railway in the same sense, constructed in the United States, is said to have been the line from Charleston, S. C., to Augusta, Ga., constructed 1828-1830. (See H. S. Haines, "Railway Corporations as Public Servants," New York, 1907, p. 14.)

much more largely than in England.”¹ He describes the restrictive provisions in the railroad charters in several states; and he contrasts the simple and inexpensive procedure with the high cost of railroad promotion in England. The period of Lardner’s observations was, however, too early for general conclusions. The subsequent history of railways in America shows that although the restrictive principles of railway legislation noticed by Lardner in 1840 contrasted with the *laissez-faire* principles in vogue in England at that time, there was in most of the states a conspicuous absence of the legal and administrative machinery for the enforcement of these restrictions. This was especially the case in the interior and western states in the earlier days and even up till the late fifties. The financial collapse of the states in the repudiation days² diminished their authority over corporations generally and although the law was restrictive, the practice was one of complete *laissez-faire*. Restrictions were ardently imposed but there was no effective authority to see that they were carried out.³ Moreover, on the very important question of rates, control was rarely even nominally prescribed in the charters. On the contrary, the directors of the railway companies were often explicitly empowered to fix whatever rates they pleased.

A charter granted by Connecticut in 1832 provides that the company may charge “such rates per mile as may be agreed upon and established from time to time by the directors of said corporation.” This in substance is the provision which is more

¹ Lardner, “Railway Economy: A Treatise on the New Act of Transport, . . .” London, 1850, p. 412, etc.

² Cf. B. H. Meyer, “A History of Early Railroad Legislation in Wisconsin.” “Historical Collections,” Vol. XIV, Madison, Wis., 1898, p. 223, and Scott, “Repudiation of State Debts,” New York, 1893.

³ B. H. Meyer. Op. cit., p. 282.

frequently found in railway charters in the United States than any other.¹

Though, as noticed by Lardner, the expense of obtaining a railway charter in the United States was much less than the expense of obtaining a railway act in England, these charters were not always easily obtained; and even when they were obtained the projects sometimes hung fire for years.² More obstacles were certainly thrown in the way of railway enterprises in Great Britain than in the United States in the early stages of railway development; but when the railway in Great Britain did succeed in getting its act passed it was not, in theory at all events, subjected to state interference in the same way as in America. It is true that in practice for the reasons explained above there was little difference; but the attitude of the legislatures and of the public was different in the two countries. The rationale of the greater desire for restriction in America lay in the circumstance that here the railways obtained advantages from the state. They obtained, for instance, extensive grants of land, state and municipal cash bonuses, exemption from taxes, etc., etc., and this circumstance caused the legislatures, the law courts and the public to regard the railways as in a peculiar sense public servants.³

¹ B. H. Meyer, "Railway Legislation in the United States," New York, 1903, p. 56.

² Cf. the interesting account of the progress of early schemes in B. H. Meyer's "History of Early Railroad Legislation in Wisconsin," above cited.

³ In this way the railway companies came to be looked upon as having a relation to the state similar to that of the so-called "serving people" in Russia in the 15th and 16th centuries. These were paid for prospective services to the state by grants of land, the revenue from which constituted their salaries. In a less formal and organized way, this practice was adopted throughout Europe, in order to secure civil, as well as military, services, and always for the same reason, viz.: that there was no ready

4. *Land grants and their results.*—The system of land grants began extensively about 1850, when the states received from Congress the public domain within their borders. The prospect of obtaining land grants offered inducements not merely to bona-fide promoters, but to others whose designs were chiefly concentrated upon the exploitation of the spirit of optimism natural in a new and growing country. The result of the land grants was in general the premature scattering of the population over widely separated areas, the deprivation of the enterprises of their endowment by ingenious schemes of finance through subsidiary land companies, and the abandonment of the recognition of responsibility for the service after the payment for it had been made. The shareholders of the companies now existing have in a measure fallen heirs to just public reprobation of the deeds of their predecessors, without falling heirs to more than a moiety of the property granted to them. Moreover, the facility with which public aid could be obtained apparently diminished the desire for economy in construction and the need of care in surveys and otherwise. If, as is alleged by some, one-half of the cost of the construction of the railways in the United States up till 1880 was provided by the public authorities, the full benefit of this enormous endowment was not obtained by the railway systems.¹ Indeed, through fraudulent and doubtful abstraction of land or funds and through mismanage-

money available from taxes paid in money to defray the salaries of public functionaries.

This also was the reason for the land grants to the railways in the United States and Canada. The companies pledged the land grants and secured the necessary capital.

¹ Cf. H. S. Haines, "Railway Corporations as Public Servants," New York, pp. 42-43.

ment as well as through over-production of railways in relation to the resources of the time,¹ most of the railways had, before 1880, passed into the hands of receivers. The tradition of the public endowment remained, however, only to irritate the public against their "servants" who had spent their "salaries" and now rendered indifferent service, partly because they had not the means to render it effective. Moreover, the tax exemptions, the monopolistic treatment of what remained of the depleted land grants, and above all, the cynical disregard of their historical relation to the state gradually inflamed the public mind against the railway corporations.

5. *Why railroads are public servants.*—While the historical fact that the railways of the United States have received valuable endowments and privileges from the public authority constitutes them in a peculiar sense public servants, the effective and permanent ground for regarding them in this light is the fact that they perform a public function. That is to say, they offer to convey the public and the goods of the public from one place to another. When the state gives a railway company a charter it does not, save in rare cases, endow it with a monopoly of this function either in general or particularly between certain places. There are many other methods of transportation both by water and by land, and ere long there may even be methods of transportation through the air. What the state does generally endow the railway with is the power of expropriation, or the power to compel owners of land which may be required for the conduct of the business of the railway to sell the land to it at a price to be fixed by arbitration.

¹ Cf. below, Section 22.

Strictly speaking, the railway enjoys no other privileges, although the privilege of expropriation is an extremely important one. The state grants the railway the right to take tolls; but this is a right which inheres in every one. It is simply the right to exact a payment for services rendered from those to whom they are rendered or a payment for permission to enter upon the property of another. The grant by the state of the right to take tolls in a certain way or to a certain amount is not a grant of a right previously non-existing, but is a limitation and definition of previously existing indefinite rights. While the earlier railways received land grants and free rights of way, such grants are now becoming unusual. Railways have to purchase as a rule the land they require either in the open market or by arbitration. It will soon become impossible to distinguish those railways which have received public grants by way of prepayment for services understood to be rendered forever afterwards, from those which have received no such grants. Even in the rare cases in which explicit acknowledgment of these obligations was made at the time, the difficulty of discrimination between one class of railways and another is probably insuperable.

While the tradition of the railway land grants and exceptional privileges influences the attitude of the American public towards railways and has even influenced the courts, especially in earlier decisions in railway cases, the principle of the regulation of railways by the state does not rest either upon the facts of the land grants or upon the traditions about them.

6. *Fundamental justification for state regulation.*—Various views of the nature of the state obtain prominence for a time and then sink into the background to be brought forward subsequently, perhaps at a great

distance of time; but there is one feature common to all views, viz., the view of the state as a regulative agency. Varying views impose varying limitations upon the range of the exercise of the regulative power; but all agree that it is an essential characteristic of the state. The experience of history is that there are periods during which the regulative function of the state tends to grow, its regulative organs to multiply and its functionaries to increase; until a point is reached where regulation becomes oppressive and the state acquires too intimate a regulative authority over individual lives. As this point approaches, society becomes filled with unrest and there are more or less evident indications of social and political upheaval. In primitive societies such moments occur with some frequency, in civilized societies more rarely. The predisposition towards social order and quiescence which on the whole is characteristic of civilized society impels it to endure regulation to a high degree and the disappearance in the modern democratic state of fear of governmental authority has resulted in the thrusting upon the government of continually increasing functions with their corollaries, continually increasing power and cost.

7. *Regulation by modern governments.*—In the second half of the Eighteenth Century and the first half of the Nineteenth Century, distrust of governments was in full vigor; but since that period the opposite tendency has manifested itself, although the area and intensity of governmental regulation is not yet by any means so great as it was in the medieval period. The demand for regulation, which is one of the incidents of the reaction against *laissez-faire*, is at present widespread and it has already been met to a very considerable extent. Regulation of trades on the ground that

they are socially injurious, as, for instance, the liquor trade, regulation of factory labor of women and children and of factories in respect to sanitation, of mines in respect to ventilation, etc., etc., has been accepted as one of the indisputable functions of the state. It has been held without question that to deny such functions to the state is to deny the expediency of its existence altogether. The only questions at issue have been the endowment of the state with the means of conducting this regulation and the specific forms which the regulation should take.

It will be observed that this principle of regulation has been applied to those activities which involve important economic relations of considerable numbers of people. A law regulating the daily number of hours of labor of sundial makers would be ridiculous, but a miner's eight-hour day law has a totally different complexion. The regulations which have been carried into effect in the modern state affect usually large numbers of persons and they are carried into effect because of their presumed beneficial influence upon society at large. This indeed is the substantial argument for the imposition of regulative authority. The question upon whom or upon what form of activity the regulation is imposed is a minor one. The fact that a particular corporation renders a public service brings it into relations perhaps of an intimate character with a more or less large number of the public and, therefore, from the current point of view entitles it to be regarded as a fit subject for regulation. It is because it comes into contact with a large number of people and not because it is explicitly a public servant or because it is a monopoly that the demand arises that its activities should be regulated. The state is presumed to be competent to regu-

late anything and anybody; all that is necessary is to devise the machinery, legal and otherwise, by means of which this may be done; and a corporation, railway or other, is thus, saving on historical or contractual grounds in the individual case, neither more nor less a subject for regulation than any corporation or than any private individual whose relations with the public are of the same magnitude and of the same intimacy.

8. *Difficulties of railway management and regulation.*—Attention has been concentrated upon the public service corporations in this connection partly because they have developed considerable powers of self-defense against projects to regulate them and partly because these projects have not always been well formulated. The intricacy of most of the businesses which form the subject of their activity renders regulation of them very difficult because of the difficulty of procuring functionaries with a sufficient knowledge of the business in question to supervise and regulate them effectively. This circumstance has prevented or postponed the effective carrying out of regulative intentions alike by the states and by the Federal government.

It must be recognized that railway enterprise was at the beginning and is now a risky business and that this very circumstance tends to limit the number of persons who are disposed to enter upon it, either financially or otherwise. The number is only extended when success is assured. This limitation involves also the limitation of competition, so that from the nature of the case there is in railway enterprise an element of quasi-monopoly or limited competition which is responsible at once for many of the abuses by which railway enterprise has been characterized and for the public hostility with which it is sometimes regarded. The field of competition is

further limited, relatively to the field of competition of some other enterprises, by the magnitude of the amount of capital required for railway construction and management; and it is further limited, so far as technical administration is concerned, by the grave difficulties which all large enterprises experience in securing the services of competent superior managers. Railway business is inevitably complicated, and the superior man, who is able at once to grasp the almost infinite detail of it together with the larger questions of policy which constantly arise and upon which the continued existence of the business may depend, is extremely hard to find. The qualifications of a first-rate railway manager are rarely combined in any one person and it is not the least notable circumstance to the credit of the United States that so many managers of remarkable ability and far-seeing sagacity have been produced within the two generations which have seen the continent covered by a network of railways.

9. *Conclusions as to governmental regulation.*—In the United States, although the early charters were, as we have seen, granted with many restrictions by the several states, these restrictions were by no means uniformly enforced, and control of the railways fell very largely into abeyance. The railway companies exercised a powerful political influence upon the state legislatures and there was undoubtedly in many states a foundation for the widespread belief that the railways, instead of being controlled, were themselves controlling the legislatures. In order to put an end to this state of matters the Interstate Commerce Commission was appointed in 1887. This Federal authority has undoubtedly exercised an immense influence, not merely upon interstate commerce, but indirectly upon trans-

portation within the state as well. In 1906 its powers were enlarged. Nearly all the individual states have established railway commissions which regulate railways within their respective boundaries.

In general, whether the powers originally granted to railways were extensive or not, there has been manifest everywhere an increasing amount of regulation. It is very difficult to determine whether or not this regulation has diminished the cost of the service to the public on the whole; but it has undoubtedly prevented or has been tending to prevent discrimination and it has, especially in Great Britain, very greatly diminished the danger of railway traveling and has reduced the number of accidents to employés. It would appear that the frank acceptance of the paramount interest of the public in their business, full publicity and fair treatment of everybody are the only means by which the railways can regain the confidence of the public which they had undoubtedly lost by an attitude which cannot be described otherwise than as obscurantist. On the other hand, it must be allowed that legislatures, commissions and public alike have not always realized that their powers over economic reactions are after all very limited and that disturbance of existing economic relations by means of regulation does not always produce the effects which are intended.

CHAPTER II

RELATION OF THE DEVELOPMENT OF TRANSPORTATION TO THE GENERAL ECONOMIC HISTORY OF AMERICA

10. *Early settlements limited to water routes.*—Having considered transportation in a general way, it is now necessary to examine some of its more important features, especially in its development in the United States.

The chief fact in the history of America is the colonization of the region, first by settlements on the coast and afterwards by settlements upon the banks of the greater rivers and finally over the valleys and plains through which these rivers and their tributaries flow. In the earlier phases the coast settlements communicated with one another by means of coasting vessels, and the rivers afforded at once alluvial soil for cultivation and means of transport for the settlers and their produce.

Although the great American plains, upon which the population gradually extended itself, are covered by river networks, the contours of the plains and the comparatively high levels at which many of the rivers have their sources, render their flow relatively rapid, excepting in their southern¹ affluents, where they become sluggish and shallow. Thus while it was easy for boats to go down stream to the seaboard with produce, it was not so easy for them to make their way up stream

¹ For interesting details about early trade on the southern rivers, see U. B. Phillips' "History of Transportation of the Eastern Cotton Belt to 1860," New York, 1908, p. 6, etc.

against the current. The earlier roads, which were merely cleared trails, were for this reason made along the banks of rivers in order that those who had navigated down stream might return by land, while the boats, being simply constructed, were sold as lumber at the port; or, the roads were portages between river systems.¹ But neither the rivers nor the roads were suited to heavy traffic in both directions and it is thus unlikely that extensive migrations could have taken place into the interior of the continent without the aid of railways or of similar mechanical contrivance. It is true that centrifugal pressure arising from some political, racial or religious cause might have forced migration upon an extensive scale, without the use of any but the most primitive means. Such migrations have occurred in history; but they have been rare in modern times.

When steamboats came to be used on the rivers they greatly increased the power of movement, but even these had serious limitations and much labor and time were necessary to render the rivers safely navigable. Those rivers that passed in their course through forest regions were obstructed by timber; and rapids and falls impeded or prevented any but interrupted navigation. The canalization of rivers and the construction of connecting canals were looked upon in America in the early part of the Nineteenth Century as they had been looked upon in England in the latter part of the eighteenth century, as the most economical and convenient method of internal transportation. The canal system developed rapidly in the United States

¹ The extensive colonization in very early times of Eastern Europe may be attributed to the networks of sluggish rivers, rising in marshes, uninterruptedly navigable for great distances and affording access to wide plains, even by the most primitive means of water transportation.

and afforded a cheap though not a speedy means of moving passengers and freight.

The canal offers great advantages in a social sense. Like a road, the canal might be made free to all—the freight boat and the canoe might ply upon its waters without interfering with one another. Apart from the proprietorship of the canal itself, no question of monopoly need arise so long as the canal is open to anyone to move his boat upon it. Competition in freight rates is as natural on a canal as it is on a river or in a coasting service. Yet the region directly served by a canal is inevitably restricted and maintenance of a canal system involves a large investment of capital. Moreover, the speed attainable by a steamboat upon restricted waters with due regard to the safety of the banks is much less than that which the same steamboat might attain in the open sea. The question of paddle wheels and propellers versus the flanged railway wheel has been fought out and there can be no doubt of the victory of the latter.¹

11. *Railways made possible colonization in the interior.*—The rapid occupation of the interior American plain may, therefore, be regarded as due primarily to the development of numerous railway systems which extended themselves, often in advance of population, and which brought the people who were to colonize the country. The development of the interior plain by means of railways was also facilitated by the political and economic necessity of connecting the Pacific with the Atlantic seaboard, the great width of the intervening area rendering colonization indispensable in order

¹ For instructive observations on this point, see Lord Kelvin, "Popular Lectures and Addresses." London, 1891, Vol. III, p. 478.

to make the crossing of it by railways economically practicable.

In the early days of railway enterprise there was comparatively little commercial and industrial capital and the people were little habituated to coöperative effort. The population was scanty and was by an apparently irresistible law of colonization in its earlier stages, spreading itself over an immense area.¹ Communications were at once necessary and difficult to establish.

The center of population, which in 1850 was east of the Ohio River, has since then moved westward until in 1900 it was at Columbus (Ind.). Although this indicates a gradual flow of the population westwards and therefore a gradually increasing density in the western portion of the area, there is still an immense region where the density is not more than two inhabitants per square mile. The incoming tide of immigration from Europe and the migration from the Eastern States have been gradually increasing the density of every part of the country; but for many years to come there must remain groups of relatively small settlements scattered over immense areas and situated at a distance from important centers of population.² The growth of great towns tends to distribute the people in masses and to leave sparsely settled intervening places.

¹ The density of the population, or the number of persons per square mile in continental United States (excluding Alaska) was 6.6 in 1800; 7.9 in 1850; and 25.6 in 1900. In the Western Division, Montana, Wyoming, California, etc., the density was 0.2 in 1850 and 3.5 in 1900. Twelfth Census of the United States, Washington, 1901, Vol. I, p. 33.

² If the average density of the United States were as great as that of the State of New York (viz., 152.6 per square mile), the total population of the United States would be fully four times its present number; if the density were as great as that of Massachusetts (viz., 348.9 per square mile), the population would be more than eight times the present number.

The problems of communication thus presented in the early days of western settlement, and to a large extent still presented, although not unique, are nevertheless different from the problems of communication in densely settled countries.¹

12. *Public aid essential at the beginning of railroad building.*—Under the special circumstances of the problem great faith in the future of the country was necessary in the early stages to produce the state of mind which led on one hand adventurous enterprisers to undertake the building of lines through regions as yet unoccupied and which led, on the other hand, financiers to entrust them with the capital necessary for their enterprises. Had the prospects of profit not been considerable and had the terms upon which the early charters were granted not been liberal, many lines would not have been built at the time they were built and some of them might not have been built at all. The railway is so necessary to the development, in any commercial sense, of a region, that even now cities and agricultural districts compete with one another for railway facilities and frequently offer what sometimes afterwards appear to the inhabitants extravagant concessions. While no doubt bargains have been made and perhaps are now being made in which the interests of the public appear to be indifferently safeguarded, it is difficult to deny at least qualified justification for an authority which sacrifices pecuniary consideration to the total public benefit which a liberal railway charter may secure, and which perhaps at the price cannot be secured in any other way.

In all countries where railways have been constructed

¹ Similar problems present themselves in Canada, in Africa, in Australia and in Siberia.

by private enterprise the initial stages of development have been characterized by very similar features. In these early stages only that portion of capital which is destined for relatively speculative and risky enterprises is drawn into railway construction. Such capital is usually in the hands of, or is usually entrusted to, rather the bold adventurer than the cautious and conservative man of business.

In Great Britain, for example, where railways were invented and where the locomotive had its origin, the project of hauling wagons by steam power was looked upon with derision and the earlier railway schemes were regarded with grave doubt and suspicion. Although the technical people of the time, like Stephenson, for instance, were men of high character, the promoters of the schemes were not all so. The railway "king" Hudson may not inappropriately be compared with some of the earlier railway magnates of the United States. Yet Hudson, in spite of opposition, helped importantly to lay the foundation of the English railway system. His optimism inspired people with confidence and although it eventually contributed to lead them into the railway mania of 1845 and to financial disaster, a lesser optimism might have postponed both the disaster and the public benefit arising from the rapid construction of the lines.¹

It is quite true that there were many "infamous events" in the early and some even in the later history of railroads in all countries; but the earlier "infamies," at all events, may be regarded as fairly to be condoned on account of the energy with which the perpetrators of them threw themselves into rendering what was, when

¹ On the railway mania see e. g. John Francis, "The History of the English Railway." London, 1851, Vol. II, *passim*.

all is said, an immense public service. The advantage of a railway system to a region, especially in America, cannot be assessed fully in merely pecuniary terms. It may be cheap at any price. The existence of the railway, its management from day to day, the efficiency, punctuality and safety with which persons and goods are carried upon it are more important economic facts than the details of the chicanery by means of which its charter was secured or even the similar chicanery by which its discriminatory rates are fixed.

13. *Provisional character of early railroad construction.*—An important fact in the history of American railways is the provisional character of much of the early construction. It has often been remarked that in Great Britain railways were built to begin with in so substantial a manner that improvements could not be effected without a sacrifice of capital almost too great to contemplate. In the United States the early railways were not constructed in so substantial a manner and improvements could thus readily be made. For some years the railways in the United States have been expending enormous sums largely out of revenue in “betterments.” Grades have been improved, steel and stone bridges have replaced wooden trestles and hundred-pound rails have replaced seventy-pound rails or even metals of a less weight. This process of “betterment” out of revenue has its inevitable limitations. Shareholders who have invested in railways want dividends; and while the improvement of the lines may be regarded as likely to increase the net return, it is possible to err, from the shareholders’ point of view, in confusing the capital and the revenue account to the disadvantage of the latter.

The provisional character of the early railways and

of many even of the lines more recently constructed was determined by several reasons: first, the difficulty of procuring the amount of capital necessary for substantial construction even if such had been desirable on general grounds: second, the immensity of the distances which had to be traversed in relation to the density of population in the regions; the inferior density of the greater part of the country imposed an inevitable limitation upon the amount of capital which it was judicious to invest in railways or was possible to obtain from investors: third, there was, not in the very earliest phases, but in the intermediate phases, a predominance of freight over passenger traffic, due to this absence of density.

The conditions described determined the character of the American railways for many years. Even now, while in all that concerns the movement and the handling of freight the American lines are at least as effective as any in the world, in much that concerns the comfort of the ordinary traveler who does not patronize the parlor or the sleeping car, and in much that concerns the safety of passengers in general and of the public, they are not so far advanced. European railway managers have greatly admired the marshaling yards and the passenger terminal stations in the important cities and have criticised sharply the signaling arrangements, the "grade" or level crossings and the lines in cities without adequate protection. These "primitive and dangerous" conditions are gradually passing away; but many of them still remain to suggest that human life is held at too cheap a fee.

14. *Influence of railways on economic development.*
—The growth of the railway systems cannot be fairly regarded otherwise than as a part of the general eco-

nomie development of a country. It is thus necessary to relate this growth to the exploitation of the natural resources and to the development of industry. The most noticeable fact in this connection is the impetus which railways have given to the production on a large scale of great staple commodities through the extension of the market for these commodities. This has resulted in the growth of specialized production and concurrently the concentration of this production in certain areas.

Two very important economic effects have followed: First, "natural economy" or self-contained production and consumption has been definitely discouraged. Before railways came into existence a certain impulse towards the discouragement of "natural economy" was given by the "colonial system," which was directed toward the encouragement of the production by the colonies and "plantations" of raw materials, which were exported to the mother countries and by them transformed into manufactured goods and re-exported. The railways have greatly facilitated the process of establishing a "commercial" economy. An economic system in which local consumption is met predominantly by local production involves a relatively small amount of movement of goods. The maximum amount of movement is to be found where everything that is consumed is brought from a distance. It has thus been the obvious policy of the railway to perpetuate the tendency of the old colonial period, the Eastern States standing in the same relation to the West and South as formerly the colonies stood to the mother country, receiving their raw materials and manufacturing for them.¹

¹ This condition is well exhibited in a map (Plate 185) in the Report of the 12th Census Statistical Atlas of the United States, Washington, 1903. By means of "special rates," railways often enable the Eastern manufacturers to retain their hold, even upon distant markets.

Second, the power which rests in the hands of railway companies of providing or withholding facilities and of determining rates which favor particular localities has enabled the railway administrations to play a large part in the distribution of industries throughout the country. It has become possible for a railway to make or to destroy an industrial center, and to render industrial capital highly remunerative or totally valueless. The tendency on the part of railways to promote long distance traffic by means of low through rates has no doubt contributed to the elimination of distance and to the equalization of purchasing advantage over a huge area; but for this very reason it has placed a power in the hands of the railways which may be exercised injuriously.¹

The inevitable progress westwards of manufacturing industry following, as it must, the drift of population, has not even yet relieved the western population from economic dependence upon the East in this sense. The Western pioneer farmer, from the beginning of his settlement, found his wants catered to by the Eastern manufacturers and merchants, so that it seemed not worth his while to make things for himself, and local industries were difficult to establish largely because of the competition of established manufacturing enterprises in the Northeastern States, for which extended markets were rapidly becoming a necessity. These tendencies have resulted in a considerable centralization of manufacture and in the concentration in certain industrial districts of certain industries.²

¹ For an interesting discussion of this point, see W. Z. Ripley, "Railway Rate-Making in Practice," *Railroad Age Gazette*, May 28, 1909.

² For example, 70 per cent of the bootmakers in the United States are to be found in New Hampshire, New York, Pennsylvania, Ohio, New Jer-

The question of the future or ultimate position of manufacturing centers becomes an increasingly complex one. In all industries there are many factors and these are more or less frequently changing with the technical changes in the industry. Under one set of conditions the determining factor in the choice of a site is power; under another set of conditions it is the supply of a bulky raw material; under another, the facilities for the despatch of the manufactured article; under another, the supply of labor of a special character; under another, proximity to water; and under still another, atmospheric conditions suited for certain processes of manufacture. All of these conditions are subject to change with the changes in technical processes. It is therefore very difficult to predict what is to be the future of industrial centers, because it is always uncertain that an observed tendency, no matter how powerful it may be, is a permanent one.

15. *Groups of American railways.*—For statistical purposes, the railways in the United States are divided by the Interstate Commerce Commission into ten groups, as follows:

1. The New England Group, comprising in 1907 one hundred and thirty-three railways, of which the New York, New Haven and Hartford and the Boston and Maine are the most important. The lines in this group serve the manufacturing centers and the shipping ports of New England. Low through rates are thus characteristic of these lines.

2. The "Hard Coal Group," comprising in 1907 five hundred and sixty-four lines, of which the Baltimore and Ohio, east of the Ohio River, the Erie, east of Salisbury and Massachusetts. (Cf. the Census Reports, Vol. Occupations, Washington, 1904.)

manca, N. Y., the Lehigh Valley, the New York Central (eight hundred miles), New York, New Haven and Hartford, Pennsylvania (seventeen hundred miles), Western New York and Pennsylvania, and the Western Maryland, are the principal lines.

3. The "Soft Coal Group," comprising in 1907 three hundred and eighty-five lines, of which the Baltimore and Ohio (between Ohio River and Vincennes, Indiana), the Chicago, Indianapolis and Louisville, the Lake Shore and Michigan Southern, the Cleveland, Cincinnati, Chicago and St. Louis (east of Terre Haute, Indiana), the Lake Erie and Western (the three last form part of the New York Central System), the Pennsylvania (part) and the Wabash (part east of Danville, Illinois) are the principal lines.

4. The Trunk Lines, comprising in 1907 one hundred and ninety-six lines, including feeders. The four great Trunk Lines are the New York Central, the Pennsylvania, the Baltimore and Ohio and the Erie.

5. The Southern Group, comprising in 1907 three hundred and sixteen lines, of which the most important are the Atlantic Coast Line (south of Savannah, Georgia), the Louisville and Nashville (south of the Ohio River), the Central of Georgia, the Illinois Central (part), the Seaboard Air Line and the Southern Railway Company.

6. The Mississippi Valley Group, comprising in 1907 two hundred and sixty-six lines, the most important of which are the Atchison, Topeka and Santa Fe (east of Kansas City, Missouri), the Minneapolis, St. Paul and Sault Sainte Marie (belonging to the Canadian Pacific Railway Company), the Chicago, Milwaukee and St. Paul, the Chicago, Rock Island and Pacific, the Chicago, St. Paul, Minneapolis and Omaha, the St.

Paul, Minnesota and Manitoba, the Illinois Central (north of Cairo, Illinois), the Northern Pacific and the Wabash.

7. The Northwestern Group, comprising seventy-seven lines, of which the most important are the Chicago and Northwestern (part), the Chicago, Burlington and Quincy (part), the Northern Pacific (part) and the Union Pacific (part).

8. The Southwestern Group, comprising two hundred and forty lines, of which the most important are the Atchison (part), the Chicago, Rock Island and Pacific (part), the Colorado and Southern, the Denver and Rio Grande (part), the Missouri, Kansas and Texas (part), the Missouri Pacific, the St. Louis and San Francisco, and the Union Pacific (part).

9. The Transcontinental or Pacific Group, comprising one hundred and eighty lines, of which the most important are the Atchison (part), the International, the Great Northern, the Missouri, Kansas and Texas, the Southern Pacific (part), and the Texas and Pacific.

10. The Mountain and North Pacific Group, comprising two hundred and twenty-two lines, of which the most important are the Atchison (part), the Denver and Rio Grande (part), the Northern Pacific (west of Idaho), the Central Pacific, the Northern Pacific (west of Idaho), the Southern Pacific (part) and the Union Pacific (part).

CHAPTER III

SPECIAL CHARACTERISTICS OF RAILWAY ENTERPRISES

16. *Magnitude of railroad capitalization.*—We must now examine some of the characteristics of railway enterprise which distinguish it in all countries, although not always to the same degree, from other enterprises, especially those which relate also to transportation.

1°. The first characteristic that strikes us is that when compared with other methods of transportation railway enterprises involve a relatively large expenditure of capital. This is due chiefly to the circumstance that unlike other methods of conveyance the railway must control and maintain a physical connection between any two points which it brings into communication. The strip of land that carries the permanent way is, as a rule, owned by the railway company that operates the line. Sometimes, no doubt, it is leased by that company or is owned by a proprietary company between which and the operating company there is a financial bond of some kind; or it is subject to contract or to running rights. Even if the land has been given to the company for nothing, it must be graded, fenced and maintained, bridges must be built where necessary and the permanent way must be laid down. Although other enterprises often own or lease their terminals, as, for instance, a steamship company sometimes owns or leases a wharf, yet the terminals of a railway usually belong to the railway itself. They are, as a rule, larger than those of

other enterprises and for the sake of public convenience they must often be situated in parts of cities where the pressure of population has raised the price of land to a high point. The railway cannot always determine the site of its terminals on the ground of economy. These terminals must be situated where the public demand dictates.

2°. A second reason for the relative magnitude of railway capital when compared with other means of transportation is the circumstance that railway companies usually own and maintain subsidiary enterprises, some of them of great magnitude. Apart from the provision of terminals, which has already been mentioned, and which in the case of steamships is frequently left to other enterprise or to the public authority, the railway customarily renders for itself such services as are analogous to the improvement of navigation, lighting, pilotage service, etc. These services are, as a rule, in other cases organized by public authority, and the mercantile marine is relieved of the obligation of raising capital for their organization. Railways, on the other hand, have to provide on their own account improvements and repairs of their permanent way, signaling, etc. In addition they not only repair but frequently build their own locomotives and their own cars. Railways own and manage hotels, restaurants, docks, wharfs, steamships, stockyards, coal mines, coal chutes, public parks, coach lines, telegraph systems, etc. All these various enterprises are supplied with capital by a single group of persons who constitute the railway company. The conduct of these enterprises is intended to promote the general interests of the railway and some of them contribute materially to the net return; but all of them involve the investment of capital in forms which in connection with

other enterprises are customarily provided by numerous independent groups of persons or by the public authority.

17. *Proportion of the cost of labor to the total expenditure.*—3°. In some of the extractive industries the proportion of the cost of labor to the total cost is very high; where work is carried on under primitive conditions without the aid of machinery, the cost of labor is almost the whole cost. The railway is an analogous case. In spite of the enormous amount of capital, the amount of labor employed by them is from the nature of the case relatively high. The exact proportion of labor cost to total cost is difficult to determine with precision; but it certainly amounts to more than one-half.

In manufacture, in general, the number of men employed and the total wages bill have been diminishing in proportion to the quantity of the product, chiefly owing to improvements of machinery. For example, in the manufacture of steel ingots and castings, and of rolled iron and steel, between 1890 and 1900, the number of salaried officials more than doubled, the number of wage earners increased only by 30 per cent, while the quantity produced more than doubled, the value of the product having increased by 80 per cent.¹ In the case of railways, the number of officials increased about 38 per cent and the number of employés other than officials increased during the same period by about 35 per cent, while the total traffic, five passengers being taken as equivalent to one ton, increased 70 per cent, and the gross earnings by about 40 per cent. If we present these percentages by index numbers the matter will be clearer.²

¹ Census Reports, 1900, Vol. X, p. 53.

² The statistics upon which these calculations are based are taken as

	Steel Manufactures.		Railways.	
	1890	1900	1890	1900
Number of officials...	100	231	100	138
Other employés	100	130	100	135
Quantity of product..	100	203	...	...
Passengers carried one mile .....	...	...	100	135
Freight carried one mile .....	...	...	100	186
Both carried one mile. ...	...	...	100	177
Value of product....	100	180	...	...
Gross earnings .....	...	...	100	140

It is thus evident that in steel ingot manufacture there has been a greater increase of output with a less increase of workers than is the case in railway business, while the increase in gross return in the case of railways has been smaller than in the case of steel. Assuming that efficiency is the same in both cases, it would appear that although the increase of employés is accompanied by increased work done and increased return, in the case of railways the work done and the return increase more slowly, and that a proportionately larger number of persons is employed by the one than by the other.

This relatively large increase in the number of employés in relation to the increment of return when compared with the increase in the number of employés in other businesses, results in further intensification relatively of the cost of labor incurred by the railways. Their wage bills go up, let us say, not quite so fast as their gross returns; but the margin is still small and

regards manufactures of steel from the Census Reports and as regards railways from the Reports of the Interstate Commerce Commission, 1890 and 1900.

wages bear a larger proportion to the gross returns than is the case in many other industries.

This large proportionate employment of labor gives rise to an important economic fact. The cost of labor has been advancing while, temporary fluctuations being left out of account, the prices of goods have been falling and the rates of freight upon these goods have been falling also, or at all events they have not been increasing. As we shall see when we come to discuss the effects of railway rates upon prices, the railway has contributed importantly towards the reduction of prices in central markets by enlarging purchasing areas; but the railways have also enlarged the area of the labor market and in so doing have, at least for the time, contributed to an increase in the price of labor. Even if it is true in the case of railways that high-priced labor is more economical than low-priced labor, the railways have apparently been contributing towards the creation of conditions which are relatively hostile to themselves. The reduction in prices of goods in the central market has brought in its train demands for lower rates; while the enlargement of the area of the market for labor has increased the price of the commodity of which the railway companies are collectively the largest individual group of consumers.

The number of employés per mile of line is subject to almost continuous increase as illustrated by the following table.

Number of railway employés of all classes per mile of line:

1889.....	459	1905.....	637
1899.....	495	1906.....	684
1904.....	611	1907.....	735

The number of railway employés per mile of line has thus increased in eighteen years by 60 per cent; while, as a previous illustration has suggested, the number of employés in important industries in relation to the increase of machinery and capital has not increased, but has rather diminished.

The following statement of the number of persons employed in gainful occupations in the United States also illustrates the increasing importance of the business from this point of view:

	1890		1900	
	(000's omitted)	%	(000's omitted)	%
Number of persons engaged in gainful occupations ¹ ..	23,318	100.00	29,287	100.00
Number of persons employed by railway companies ² ..	749	3.20	1,017	3.50

The number of employés actually engaged in "conducting transportation" per mile of line has increased from 179 in 1890 to 314 in 1907.

18. *Variability of traffic returns.*—4°. A fourth important fact is that railways are peculiarly subject to variations of traffic according to the season and according to the variations of seasons. Sometimes these fluctuations compensate one another and railways have compensating advantages resulting from the mere extent of the area they serve and from the magnitude of their operations. Yet the fluctuations are of corresponding magnitude and immense quantities of plant may be con-

¹ From the Census Reports, 1900, Vol. X, p. ixv.

² From the I. C. C. Reports. The statistics in the census returns, so far as these have been published, do not fully discriminate railroad employés from employés in other forms of transportation and in trade.

demned to prolonged idleness and deterioration. In this respect they resemble some branches of the iron and machinery trades, the scale only rendering the railway experience unique. A heavy grain crop demands for its transportation immense numbers of cars, a large proportion of which must be sent westwards to the wheat fields empty for loading wheat as rapidly as possible.¹ Where the wheat is transported partly by rail and partly by water it is necessary that the haulage of grain should be accomplished before the winter sets in and the lake ports are closed for navigation. Thousands of cars employed for the purpose of carrying grain during September, October and November may have to lie idle during the remainder of the year until the next harvest is due unless the general condition of industry enables them to be absorbed into the general traffic. The mere concentration, without undue cost in demurrage, of a vast number of cars at western points is a task of railway management of no little difficulty.

19. *Railways cannot withdraw facilities.*—5°. A fifth peculiarity of railways, in which, however, they do not occupy a unique position, is the necessity of doing business whether it yields them the amount of return which they might desire or not. This may perhaps be made more clear by discussing an analogous case. In the money market in all great centers there are people who make an income by borrowing and lending money in large amounts for short periods. The business requires considerable capital, credit and connection. The rate at which funds in their hands can be lent is determined by the competition of the market from day to day and sometimes from hour to hour. The continuity of a

¹ The total mileage of empty cars in proportion to the mileage of loaded cars in 1907 was almost 42 per cent. I. C. C. Reports, 1907, p. 86.

business of this kind depends entirely upon the broker, for such he is, being able to lend say \$500,000 to a client at a moment's notice under all ordinary conditions of the market. If he cannot do this or will not do it, the credit of the client and the security he has to offer not being in doubt, he might as well go out of business. If the rate of interest determined by competition is relatively high, he will gain partly from his own capital and partly from the funds of his clients which he may have borrowed at a lower rate under previous conditions of the market; but if the rate is low, he may have to lose. In any case he must lend. If he has not funds by him he must deposit securities and borrow in turn; but unless he lends on demand at the market rate, he loses his clients, not merely for the particular transaction in question, but perhaps permanently. These conditions account for the prevalence of short loans for large amounts at rates of interest which are often fractions of 1 per cent per annum.

The railway company is in a position very similar to that of the money or "bill" broker; the business must be done, the traffic must be secured. Even if it does not pay at once and directly, the nature of the case is such that it must be secured. If traffic is allowed to pass from its lines, other connections will be established and the traffic passes permanently.

Of course this state of matters exists only where there is competition, either between railways or between them and other means of transportation.

20. *Nature of railway monopoly.*—An alleged peculiarity of railways is that they are monopolies.¹ In spite of formidable authority to the contrary, it appears to the writer that railways can be regarded as monop-

¹ See Chapter I.

olies only in a very limited sense of that expression. Not only do they compete with one another; but they compete, during a great part of the year in all latitudes and during the whole of the year in some, with water transportation and even in some countries with other forms of land transportation.¹ To regard them as "natural monopolies" is to deny a future to invention.

Mr. John D. Rockefeller, who enjoys a more extensive reputation as an economic practitioner than as an economic philosopher, is nevertheless credited with the promulgation of a brief but interesting theory of monopoly, a subject upon which he may be presumed to be a first-rate authority. He is reported to have said that a monopoly can be successfully exercised in respect only to a commodity the raw material of which exists in great available quantity in nature, and which requires a very large capital for its exploitation. The commodity must moreover be in demand very extensively or universally. If to these elements we add a commodity which in the existing state of invention cannot be replaced by a substitute beyond the power of the owners of the monopoly to purchase and suppress if need be, we have a fairly complete and compact theory of monopoly. We may now ask whether transportation by railway is a monopoly of this kind, assuming the terms commodity and service to be in this case convertible. There is no doubt that in this sense railway transportation is a comparatively suitable subject for monopoly. Save in rare cases, however, and consolidation notwithstanding, transportation by railway in America has not yet become a monopoly, still less has transportation in general. The competition of the railways as at present ex-

¹ The electric lines are formidable competitors for passenger traffic in America.

isting, limited and ineffective as it sometimes is, and the competition of these with the waterways has, so far at all events, prevented the realization of monopoly. Again, save in rare cases, railways are not legal monopolies and in no case can they be regarded as "natural" monopolies in the sense that they are immune from substitution. Indeed, the expression "natural" monopoly may be placed in the same category as "natural right," because it is open to the same criticism.

CHAPTER IV.

RAILWAY CAPITAL

21. *Provision of temporary funds.*—How is the capital to be obtained which is necessary in order to provide railways to meet the demands of an increasing population? The cheapest market for money is always the largest; and only by entering into the money market of the world have the railway companies been able up till the present time to obtain the enormous mass of capital necessary for their business. Nor can it be otherwise in the future. Money must be obtained for all large enterprises wherever it is to be had most cheaply.

Of late years much capital has been obtained in Europe for railways in the United States on exceedingly onerous terms.¹ These terms were dictated chiefly by the urgency of the need of the companies for funds at a time when the market was overwhelmed with demands, and borrowers had to pay a high price for money. The stringency of the market was, however, to some extent caused by the large demand for railway capital for America; and on account of the coincidence of other demands of an extensive character, there was a real scarcity of loanable funds in the market. This scarcity in the presence of continually increasing demand was the cause of the high price of capital at that time. Yet it must not be denied that the market for

¹ During the period of monetary stringency in 1907, one of the largest of the American railways was obliged to pay 7 per cent per annum for a loan in Paris.

capital may be restricted to certain classes of borrowers and not to others by reason of the insurance for risk which lenders may feel it necessary to add to the current rate of interest and by reason of some lenders refusing to lend upon any terms. Such a state of matters may be produced by legislation of a confiscatory character or even by legislation to which that character is attributed by financiers. The immediate effect of legislation or of judicial action of this kind is to raise the rate of interest and to make it more difficult to get money. The legislation may be perfectly justifiable, but a price must be paid for it. The social result may be worth the price or the advance of interest may be only temporary, but its existence is one of the reactions which must be reckoned upon.

If there can be held to be any tendency in railway finance, it may be perhaps in the direction of simplifying the issues of capital and of consolidating loans by conversion. A simple and readily intelligible stock of large amount with a definite status as regards security must always have a wider market than a small issue based upon an obscure or indefinite mortgage.

22. *Railway capital is a permanent investment.*— From the social point of view the most important feature of railway finance is the proportion which freshly demanded funds bear to the total investments of all classes at the time. Upon this proportion depends in the long run not merely the velocity of return to the capital in question, but the general financial mechanism of the country. Upon these two factors depends in turn the facility with which further increments of capital may be obtained. It is obvious that the direction of the working force of a country and of its funds and credit into highly permanent forms of capital, the veloc-

ity of the return to which is low, is a process which cannot go beyond a certain point. We cannot all make our living by moving one another about.

It is clear that at any particular moment the demand for railway accommodation may exceed the possibilities of economical supply. For in this case the demand cannot always be regarded as effective demand in the strict sense of the phrase. Demand is not really effective unless those who demand have resources to exchange for what they want. In the case of railways, public clamor for additional facilities, new lines or new rolling stock may be quite independent of any existence or provision of the capital by means of which these may be provided or of any security for it. The prospect of increased gains may induce railway companies to procure even upon onerous terms the capital required to meet these demands; but in this way the business of transportation may draw into it, an amount of capital out of proportion to the total amount otherwise economically employed at the time, the velocity of return to the new railway capital will thus be low, and further increments of capital will become more difficult to obtain. Capital invested in railways is invested in highly permanent forms in a physical sense, in other words, it has assumed forms which in fault of its intended use, are not readily convertible into forms suitable for other uses. This disproportionate investment in highly permanent forms leads at a certain point to economic disturbance. Such a course of events occurred in the years prior to 1876, culminating in the financial collapse of nearly all the railways in the United States and in a general commercial crisis. Such an experience is very costly for a nation and is very apt to retard its development. Although the process is per-

haps impossible to control, it is of the first importance to a country that railway building or any other building should keep pace with but should not outrun the incidents of its development otherwise. And this is true whether the railways are built upon the credit of private companies or upon the credit of the state. Probably no statistical estimate, even of an approximate character, can be made of the "proper" proportions, which should be borne by railway investment to general economic conditions. Yet if these proportions become in fact "improper," retribution follows swiftly. The following figures are not intended to do more than merely to serve as an illustration.

Percentage of steam railroad employés (exclusive of officials and clerks) to the total number of persons engaged in gainful occupations in the United States. ¹	1880	1890	1900
	1.35	1.98	2.0

The rate of increase appears to have been checked; but the increase in twenty years is remarkable. The following, however, suggests that the margin of safety in a financial sense has increased in the past fourteen years:

Percentage of the value of the railroads to the estimated total wealth of the United States. ²	1880	1890	1900	1904
	12.70	12.75	10.20	10.50

¹ Calculated from data in the Census Reports, Vol. Occupations, Railway returns are not available prior to 1880. If those for the later years are taken from the I. C. C. Reports, the proportions will be larger. Cf. Section 259.

² Calculated from data in Vol. "Wealth, Debt and Taxation," Census Report, 1904.

23. *Railway capital and rates.*—While, for reasons which are stated above, the total amount of capital invested in railway enterprise upon which interest and dividends are payable is not a matter of indifference to the country at large, there are certain aspects in which the amount of capital invested in a railway or in any group of railways is matter of indifference. For instance, in determining what is or is not a reasonable rate, the question of the amount of capital invested in the line as a whole or in any part of it is quite irrelevant. Nor is the then existing so-called physical value of the plant relevant either. From the point of view of railway management, interest and dividends must be paid; but they can only be paid legitimately if they are earned. It is the duty of the management to earn them if it can; but if it cannot do so, in the absence of an explicit guarantee it is not the duty of the public, or of any section of it, to supply the deficiency. It may, however, in certain cases be expedient in the general interest to give aid to a company in such a strait. The passing of a great railway into liquidation would be a very disastrous experience for a country and it might be politically and financially a wise course for the government to assist the railway to tide over a difficult period by guarantees or loans in some form. This has been done on occasion by the Canadian government in connection with all the great railways of Canada. But under ordinary circumstances and indeed in any circumstances in the long run, the railway company is an independent enterprise, standing or falling by its own credit.¹

From this point of view it is not important to the pub-

¹ Small railway systems frequently undergo financial reconstruction, involving sacrifice to the holders of their securities. A case of this kind in 1909 was that of the Cincinnati, Hamilton & Dayton Railway Company.

lic, unless the line is being valued for purposes of purchase by it or for taxation on the basis of capital actually invested, how much or how little so-called "water" there is in the nominal amount of capital. A railway is not entitled to a high rate merely because its capital is high, nor is it a sufficient reason why its rates should be reduced, that its capital is low. A relatively low statement of capital account involves a relatively high statement of revenue account. A railway which pays a dividend of 10 per cent upon a capital so stated may subject itself to attack on the ground that it is enabled to do so on account of the excessive rates which it charges. But this is an unstable ground for attack; because the earnings of a relatively high net revenue may be due to a number of causes, among them being the efficient management of the line. High net revenue may or may not be associated with high freight or passenger rates. That a rate for oats of 15 cents per hundred pounds is unreasonable is not proved by the circumstance that the railway which carries it is earning 10 per cent upon its capital. It might be doing so because its rate was 15 cents and it might be as unable to do so if its rate was raised to 20 cents as if it were reduced to 10 cents.

Clearly then the capital and revenue of a railway are of interest to the public on other grounds than those connected with rates or the regulation of them.

The total amount of the capital invested in the railways reporting to the Interstate Commerce Commission in 1906 was \$12,585,449,585. This is the amount of the par value of the securities of these railways in the hands of the public. It appears that railway companies whose aggregate capital is represented by this sum hold securities in other railways amounting to

\$5,556,212,497.¹ So that it may be said that two-thirds of the total number of railways in the United States own the lines of the remaining third.

Any statement of the average return to this capital is of little value because it is the result of widely separated maxima and minima.

Provisional conclusions can, however, be drawn from the rate of increase of capital and the rate of increase of earnings. Diagram I shows that from 1890 till 1892 the rate of increase of gross earnings was less than the rate of increase of capital; from 1892 till 1893 it was slightly more; but from that year, which was one of commercial crisis, it dropped sharply and, while capital was increasing slightly, the gross earnings fell almost to the point they had reached in 1890. From 1895, with an interruption in 1897, the gross earnings have increased at a greater rate than the increase in capital, until 1907. These years were years of extraordinary prosperity and they not only offset the lean years from 1893 till 1898, but they afforded means to provide reserves against the contingencies of the future. Diagram II shows how increased gross revenue was accompanied by increased expenses, as regards both operating and fixed charges.

¹ See I. C. C. Special Report, No. I. "Intercorporate Relationships of Railways in the United States as of June 30, 1906," Washington, 1908, p. 45. Similar data are not available for earlier years, complete inquiry having been made in 1906 for the first time.

DIAGRAM I

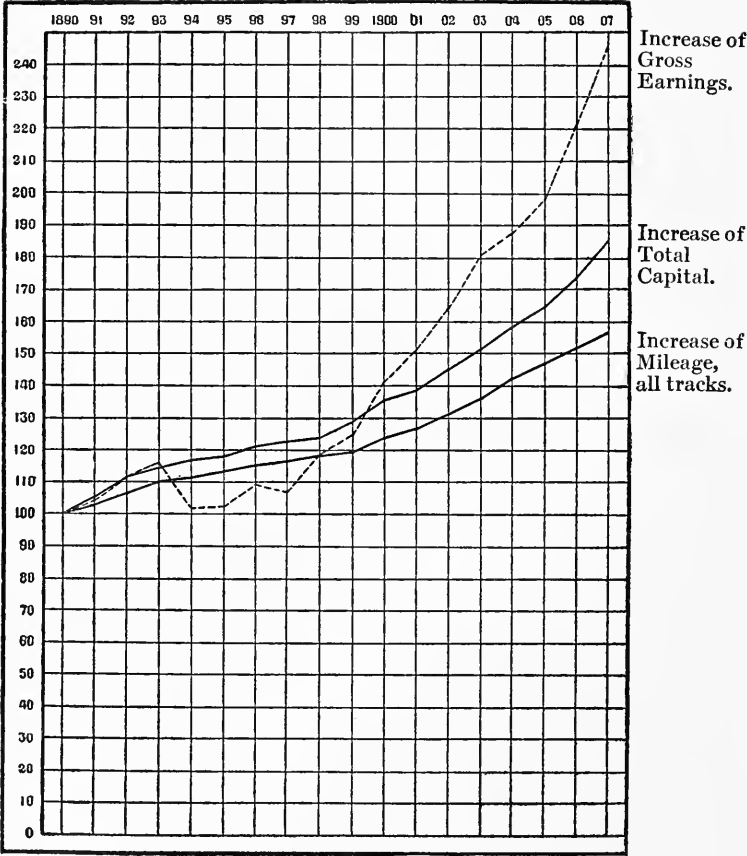
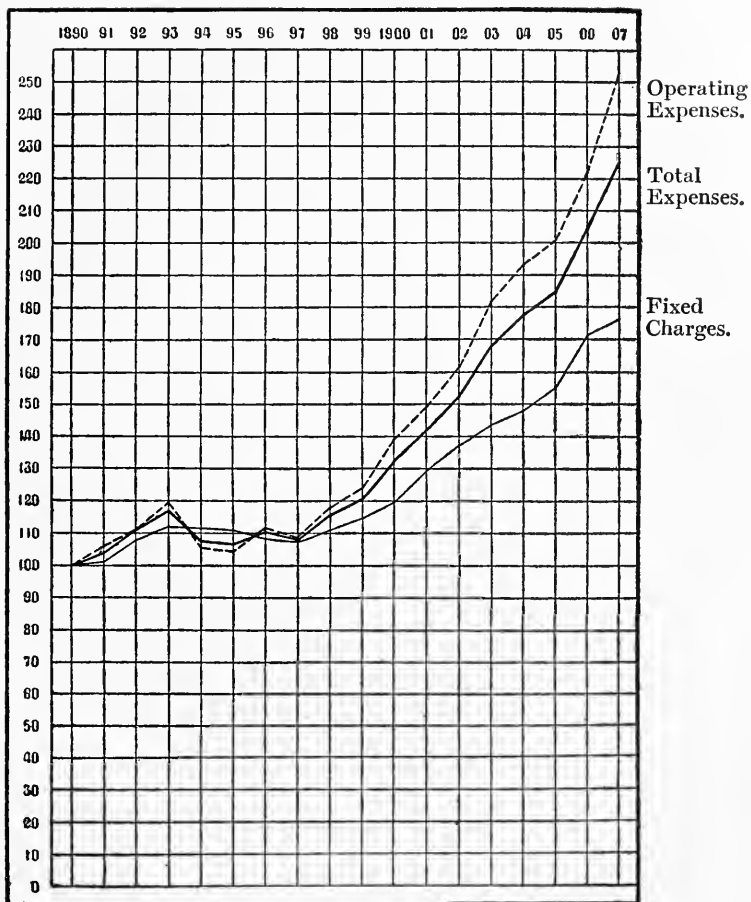


DIAGRAM II



CHAPTER V

CONSOLIDATION

24. *Underlying reasons for consolidation.*—The amalgamation or consolidation of railways was in the early phases of railway development looked upon in general with suspicion. Yet consolidation in the case of lines whose systems enabled through routes to be created became an absolute necessity. Impediments were in general thrown in the way of the consolidation of competing lines because it was supposed that the public interest would suffer by the mitigation of competition. The earlier consolidations were, however, caused chiefly by the defective management of the smaller lines, and by the better management and greater economy of the larger lines. The only way in which the property of the smaller lines might be saved from complete ruin was frequently by leasing the smaller lines to larger ones. Indeed, this system of “farming” lines came to be recommended as a policy of railway reform. The system of leasing led gradually to absorption and when the large systems were formed in this way and railway development began on a large scale, it became apparent that magnitude was an important element in railway management. This revealed itself on different scales in all countries about the same time, that is to say, about 1850.

From that time onwards consolidations proceeded. In the United States, although the very great consolidations are matters of recent history, these were preceded by others on a scale smaller absolutely, though

greater relatively. This process has now gone so far that it appears that at present the capital of one-third of the railways is owned by the other two-thirds. In addition to these financial affiliations railways enter into other forms of association or, without being in any way definitely associated, work into one another's hands because their respective capitals are extensively held or controlled by the same groups of railway administrators.

The public attitude towards consolidation of any kind has of late years been very hostile because it has been feared that regulation would not be effective enough to control railway monopoly and that the force of competition should on that account be carefully preserved. But experience has shown, as pointed out elsewhere, that consolidation has rendered competition more effective and more strenuous. The competition of a number of small lines is as nothing compared to a rate war between great rival systems. Experience has shown that competition also has its evils, that rate wars produce great disturbance of the ordinary course of business and that they sometimes end in a truce in which the public are the chief sufferers. Again consolidation has been an important factor in creating a class of security which attracts investors and therefore enables the great railway to secure its capital in the financial markets of the world at the lowest price. Indeed the finding of a vast mass of railway capital has been perhaps the most important factor in the money market. Railway capital has by this means been obtained from an ever-widening constituency.

Indeed, the capital of railways has come to be provided by so enormous a number of individuals directly or indirectly that there are very few well-to-do people in any modern nation who are not in some way interested finan-

cially in the railways of their own country and sometimes in those of other countries as well. Apart from actual investment by great masses of people, the hypothecation even of large holdings, and indeed, especially of these, brings banks and other similar institutions into the financial net of the railways. The shareholders of these institutions, and in the case of banks their depositors and noteholders, become involuntarily implicated in railway finance. Even the public authorities to whom the railways stand in the relation frequently of the largest taxpayers, are financially interested in them. Those who are explicitly shareholders are constantly changing their holdings, so that the actual *personnels* of the companies are subject to continual fluctuation. Under these circumstances the shareholders exercise after all very little influence upon the administration of the companies. The actual management is generally in the hands of a small number of persons who frequently own only a small portion of the stock. They have shown themselves to be capable administrators and they are left in office unless some struggle takes place for control between rival groups.

All this has its advantages and its dangers. The latter form part of the price we have to pay on the one hand for the mobility of railway capital and on the other for the rapid construction of the railways. This state of matters has, however, two important results. The railway corporations in mass are looked upon as if they were not composed of persons—as if they were a huge impersonal monster whose existence is a menace to society. Secondly, the railways are identified with conspicuous individuals who are supposed to wield and who no doubt sometimes do wield the immense power which their position at the head of a great railway system gives

them. The frequent transference of railway stock upon the market, incidental to the modern organization of finance, has perhaps been chiefly responsible for this attitude of the public mind, and to this also perhaps has been due the evasion of their responsibility for the acts of their agents which the shareholders of large public companies customarily manifest. The public attack upon corporations of recent years has been coincident with quite unprecedented speculation in their stocks, a speculation which reaches far beyond the limits of the professional market and which has drawn into its field no inconsiderable number of the general public.

Either this public attack has been pure hypocrisy, or the effect of it must be to induce or compel those who have supplied and are supplying the capital of the railways to feel a sense of responsibility and to require their agents to regard consideration of the public interest as an essential element in the business. The good will of the people is by far the most valuable asset which a railway company can possess. To disregard it for the purpose of making a temporary profit is to kill the goose which lays the golden eggs. There is an element of quasi-monopoly in railway business; but there is also an element of immobility. For this reason the good will of the business is its chief asset.

25. *Fast freight lines*.—It has been remarked above that the railway companies frequently enter into association of another character than that which may fairly be regarded as consolidation. Among these associations, one form has played a conspicuous rôle in the play of competition for traffic in which the great railways engage. This form of association is known as the Fast Freight lines. These were brought into existence by the competition of routes and they were for a

time very effective in promoting this competition. They still exist, although they appear to be less active in their operation than they were and some of them have been abandoned. The reasons for this appear to be the extent to which the routes have now been established, the mitigation of competition by the regulation of rates and the direct economy of doing away with an expensive item of service. The first of these Fast Freight lines was the Merchants' Despatch which operated over the New York Central system. This line was followed by the Union on the Pennsylvania Railway and the National Despatch which was formed by the Chicago and Grand Trunk, the Grand Trunk (before the amalgamation of these two lines), the Boston & Maine and the Central Vermont. This line was followed by others: the Canadian Pacific Despatch, organized by the Canadian Pacific Railway, and the Boston & Maine; the Commercial Despatch, organized by the Grand Trunk Railway and effective especially in securing the dressed beef traffic from Chicago; the Merchants' Despatch, and some eleven others on the New York Central lines. These lines, like the other Fast Freight lines which followed them, were organized for the purpose of canvassing for freight in the leading cities more or less tributary to those lines, and for the purpose of tracing freight and keeping in close touch with the shippers.

There can be no doubt that through these Fast Freight lines, most of the discriminatory rates were fixed and traffic was secured. Their canvassers made the arrangements for the secret rebates and conducted the competition in such a way as to secure the traffic for their lines. They were the outcome of aggressive competition and with their passing there may pass also some of the aggressiveness of the competition of the railways with each other.

CHAPTER VI

CLASSIFICATION OF FREIGHT

26. *Early classifications.*—The determination of rates in detail by railway managers cannot be said to be effected upon any definite principle properly susceptible of being described as scientific. The reasons for this are discussed elsewhere. Rates are indeed largely traditional;¹ and the traditions go back sometimes to early canal rates or even to rates fixed by “freighters” who carried goods on wagons before railways came into existence. The division of goods into groups appears at a very early stage. Classification for coasting and inland water transportation was simple, raw materials being carried at a relatively low rate and manufactured goods at a higher rate, the rates being expressed in terms of the numerous traditional measures by which the commodities in question were customarily sold. But classification gradually became more complicated, raw materials and manufactured goods being each divided into subclasses. For instance, in a schedule of freight rates charged by coasting vessels in the end of the Eighteenth Century, raw cotton is charged nearly two and one-half times as much as iron, and tobacco, sugar and rum about twice as much as tar, beef, pork and flour.²

¹ An interesting instance of the perpetuation of a traditional rate is to be found in the rate on lumber in Wisconsin. (Wisconsin Railroad Commission, 1908.) Cf. W. Z. Ripley, “Railway Rate Making in Practice,” *Railway Age Gazette*, June 4, 1909.

² U. B. Phillips, “A History of Transportation in the Eastern Cotton Belt to 1860,” p. 44.

Although such classification bore a rough approximation to the relative normal values of the commodities, it did not vary with their market prices. Railway rates to begin with were usually fixed for competitive purposes at a point slightly lower than the customary rates by the other means of transportation in vogue at the time, and the classification was generally the same as that previously in use.

While in the course of years, classification of freight rates has become very complicated, following as it has the increasing miscellaneity of industry, it has not altered its essential character. It still bears a rough approximation to the relative value of commodities although in many cases these relative values are no longer what they were at distant periods of time, and classification does not now, as it did not, formerly, vary directly with the market prices. Over a long period of time it may be that classification reflects the changes in the market; but it does not do so rapidly.

27. *Factors that govern classification.*—Under modern conditions of transportation the value of the commodity transported is only one of the factors which are customarily taken into account in deciding upon a change in classification. It must be realized that a complete history of classification would show that tradition determined the early classes and that these have been gradually changed for reasons of a very varied character, of which changes in relative values is only one. Among the other factors are the following:

a. The quantity of a commodity which is transported as a whole in relation to the quantities customarily transported in a normal shipment must be an important criterion of classification. It is however also a factor which reacts upon the traffic, for a

raw material, for example, which is classed relatively high upon the ground that it is transported in small quantities might be transported in large quantities if it were put into a lower class. On the other hand, a raw material might be of such a character that no reduction in classification would affect the demand for it. The skilful railway manager thus proposes a classification which will have the effect of stimulating the demand over the widest area served by his own or subsidiary lines, at least up to the point at which it becomes manifest that further stimulation would, all things considered, be a policy unprofitable for the line. This factor, like most of those the consideration of which follows, cannot be separated from the question of price. If the price of transportation forms, as it does in the case of most crude materials, a large part of the total price, then a reduction in classification will necessarily have an effect upon demand greater than such a reduction in the case of goods in another category. The principal effect of an application of the criterion of quantity is, however, to render classification local, or in other words to prevent any general classification applicable to the whole of the United States. The quantity of raw cotton transported by rail in South Carolina bears a large proportion to the total traffic of the lines, while in Missouri it bears an insignificant proportion. The quantity of wheat carried in Missouri is similarly great, while the quantity carried in Alabama is insignificant.¹ In the case of some commodities shipments of a commodity, which are made in one region in whole train loads, in another are made in single car loads, or even in lesser quantities.

¹ For other cases of this kind, see evidence of Mr. Lincoln in Hearings, etc., Washington, 1906, Vol. II, p. 1226.

In addition to the question of classification of goods, in respect to quantity, as a criterion of rate determination, the question of classification of regions in respect to quantity of goods of all classes must also be regarded. The density of population in the Eastern States and the highly miscellaneous character of the traffic in the East are important factors in the practical working of railroad traffic. The average car load in the Eastern lines is said to be between 25,000 and 30,000 pounds, while on the Western lines it is said to be between 12,000 and 18,000.¹ Car loads in the East however vary from 10,000 to 40,000; and in the West from 12,000 to 24,000 pounds. Exact statistics on the subject are wanting; but these figures may be taken as illustrative of a fact, which is that larger car loads may be made up on the Eastern lines than on the Western lines, and that therefore the "dead haul" is by so much less on the one series of lines than on the other. In addition to this point, there is another important factor in respect to regions. In the West and in the South, a large portion of the traffic is seasonal, and is for that reason a one-way traffic. Empty cars have to be run south for the cotton crop and empty cars have to be run west for the wheat. The mass of the traffic is so great that the business is a very profitable one; but the return from the business under the circumstances described is less than it would be under circumstances in which the cars could be loaded in both directions; and the rates must be relatively higher under existing circumstances than they might be otherwise.

b. The second criterion is the weight of a commodity in relation to its bulk. This is quite different from the first, for it relates definitely to the cost of carrying the

¹ Evidence by Mr. Lincoln. Hearings, etc., Vol. II, p. 1226.

goods. A ton of ladies' hats occupies a larger amount of car space than a ton of pig iron, and for this reason these goods may and must be put into separate classes. The amount of rolling stock required by relatively light goods of this order is weight for weight much greater than that required for heavy goods. Such goods therefore may fairly be regarded as contributory to the joint cost of transportation to a greater extent than that which their mere weight might determine. In connection with this factor also tradition has played a large part. The relation between weight and bulk which is customarily accepted, viz., forty cubic feet equal to one ton, is derived from maritime practice.¹

c. Another criterion of classification is the convenience or otherwise of handling the goods at terminals and of loading them along with other goods. In connection with this factor the factor of risk arising from the transportation of dangerous, perishable or damageable commodities has also to be considered. Carboys of sulphuric acid cannot be carried in the same car load as boxes of fancy goods. If the traffic in sulphuric acid is sufficient to justify the expectation that complete car loads will, as a rule, be offered, the classification will be governed accordingly; but if only single carboys are offered, it is clear that this circumstance must also determine the classification. Fruit and glass are examples of perishable and fragile goods in which the question of handling plays a considerable part in the determination of classification.

d. A fourth criterion might be regarded as the element of time. This applies especially to perishable

¹ Forty cubic feet equal one ton, is a purely arbitrary relation. It is rather more favorable to light goods than the relation of the bulk of water to its weight; this is 35.943 cubic feet equal to one ton.

goods. In this connection means of preventing decay by refrigerating cars, for example, are often provided by the railways. For these conveniences a charge is made in addition to the freight rate.

28. *Tendency toward uniform classification.*—The necessity of regional classification alluded to above and the discontinuity of the railways, led each railway at the beginning to compile its own classification schedule. Up till 1887, 131 railways east of the Mississippi had each a separate classification.¹ In addition to the classified rates, there was another large category known as commodity rates or rates upon stable goods.

In 1887 the Interstate Commerce Commission thus found itself confronted at the very outset of its career with the question of classification. Its first report contains an interesting account of the origin of classification and of its varied character. At that time the three principal classification schedules were the Official, the Western and that of the Southern Railway and Steamship Association. The territory of the first of these extended east of Chicago and St. Louis, and north of the Ohio River; that of the second, west, north and southwest from Chicago and St. Louis; and that of the third, south of the Potomac and east of the Mississippi.¹ In 1888 an attempt was made to merge the Official and the Western schedules into one; but this attempt did not succeed and although many efforts have been made towards a uniform classification, the difficulties up till the present have proved to be insuperable.

The inconveniences of the present system are, however, very great. These occur chiefly in long distance through traffic where the goods are carried not only

¹ Cf. I. C. C. Fourth Report, p. 198.

² I. C. C., Fifth Report, p. 24.

from one state to another, but from one classification territory to another. In such a case, for example, it is not infrequent for goods to be classed third-class in one territory and first-class in another. In calculating rates from classification schedules on long distance traffic it is thus important to take into account the difference in classification. This difference in classification is sometimes great enough to justify a roundabout route in preference to a straight one in order that a greater mileage of the lower classification may be taken advantage of.¹

Although it may be as is customarily supposed that 85 per cent of the traffic in the United States is charged by "commodity" and not by "classification" rates, commodity rates are as a rule not entirely independent of classification. Almost all commodity rates are more or less directly derived from the classification rate. This derivation appears occasionally in disputes about the reasonableness of a commodity rate when the explanation is advanced by the railway companies that the rate has been based upon, although it is not the same as, the rate for the class of goods to which the commodity belongs.² The importance of classification is thus not seriously diminished by the fact that rates are apparently gravitating into commodity rates.

The Canadian joint classification is composed of ten classes, while the official classification schedules of the United States contain six classes. This disparity pro-

¹ An instance of a somewhat similar kind in which the Standard Oil Company took advantage of a combination of rates which, although composed of published rates, seems to have escaped the notice of independent shippers, is given in the "Report of the Commissioner of Corporations on the Transportation of Petroleum," May 21, 1906, Washington, 1906, p. 463.

² See e. g., I. C. C. Opinion No. 948, Case No. 1774, decided June 7, 1909.

duces certain anomalies when changes in rates occur because the incidence of these changes is such that the two countries are differently affected. Thus a reduction of 30 cents between given points upon the first-class of the United States official classification with pro rata reductions in the other classes will result in more numerous and more gradual downward steps to the lowest class in the ten class schedule than in the six class schedule. A uniform classification would remove many anomalies; but it might affect different classes of shippers unequally.¹ At present the Canadian joint classification does not permit car loads to be made up of goods of different classes for western points, unless they are under a specific heading. All kinds of freight east of Port Arthur are forwarded at the highest car load rating. West of Port Arthur this rule does not apply. The rule in Canadian classification is thus made to conform with the rule in United States classifications. The Eastern United States classification permits mixing in car loads, the western does not. This arrangement gives an advantage to the wholesale dealers or jobbers, who alone are able, through the extent of their business, to ship goods of a single class in car loads. If a uniform classification for Canada and the United States were adopted and if that uniform classification were accompanied with the proviso that goods of different classes might be shipped in such a way as to make up a car load in order to take advantage of the car load rate, it is clear that the wholesale dealers would lose an advantage which they possess at present.

¹ On this question of international classification, see Report of Railway and Transportation Committee Canadian Manufacturers' Association (Toronto), 1908, p. 571.

CHAPTER VII

FIXATION OF RATES

29. *General principles of rate-making.*—The pursuit of a scientific principle of rate determination is probably quite hopeless; yet some conception of the process may be derived from an examination of the principles which from time to time have been urged and upon which rates have been fixed.

These principles may be divided into two classes: (1) those which apply to railways considered as monopolies; and (2) those which apply to railways considered as subject to competition. (1) A railway which enjoys a state monopoly or a monopoly granted by the state may fix its rates arbitrarily (a) by imposing a uniform rate per unit of weight per mile without regard to expenditure or revenue; or (b) by imposing a uniform rate per unit of weight without regard to distance and without regard to expenditure or revenue. Such an arbitrary rate would be analogous to a letter or parcel postage rate.

Or, a railway which enjoys a monopoly, granted by the state or acquired otherwise, may fix its rates upon one or other of the following principles. It may impose rates in accordance with, (a) the estimated cost to the railway of transporting the goods in question; or, (b) the value (i. e., either the market price, the average market price, or a hypothetical normal price) of the goods which are transported; or (c) the estimated value

or importance of the service which is rendered to the sender and the receiver.

The complete, continued and consistent imposition of rates on any of these principles can be accomplished only by a monopoly legally recognized and defended by the state or possessed of sufficient economic strength independently of the state to impose its rates in accordance with these fixed principles. A railway rate imposed by a monopoly in this way is analogous to a tax. This was long ago pointed out by Gustav Cohn;¹ although he seemed to recognize in the railway rate conformity to only one of the customary criteria of a good tax, viz., that it was levied or intended to be levied upon persons in proportion to their ability to pay. Cohn's position was that railways were essentially monopolies and that their rates were essentially taxes; and from these circumstances, he drew the conclusion that railways should belong to the state because the state alone could be safely entrusted with the collection of taxes.

A close examination of the reasoning will show that the premises being granted it is quite invulnerable. Only a monopoly can secure with certainty a payment which is based upon a fixed principle irrespective of other considerations.

Let us now apply these so-called principles to the case of railways not demonstratively monopolistic, but in the conduct of which the manager meets with competition from other railways or from other means of transport.

¹ Gustav Cohn, "Die Englische Eisenbahnpolitik der letzten zehn Jahre" (1873-1883), Leipzig, 1883, pp. 65-100. His position is summarized by F. W. Taussig in the *Quarterly Journal of Economics*, Vol. V, p. 438. (Reprinted in "Railway Problems," ed. W. Z. Ripley, Boston, 1907, p. 123.)

30. *Cost of service principle.*—Can the principle of cost of service be applied in such a case? Professor Taussig¹ has shown that railways belong to the group of enterprises whose complex operations depend upon one another. If one be withdrawn the other operations are impossible. Railways therefore are subject to what is called joint cost. Without discussing the extent to which railways may be regarded as occupying a unique place in this group or how far it is true that almost all industries under modern conditions might fairly be placed in it, it may be observed that it may not be impossible to dismember the total cost of operations carried on by the railway and to find what terminals cost, what haulage costs, what car accommodation costs, and so on. But when this is done, we have not got rid of the fact that a rate for the carriage of goods based on the cost of the service might be such that no goods would be forwarded, for the cost might be prohibitive. The only perfect example of such a rate would be found in the case of goods whose carriage was indispensable and whose carriage was accomplished by one government or department and charged to another. Clearly in free and unrestrained commerce a general adoption of the cost of service is impossible. The element of cost is a very variable one. The reaction of price upon cost is at least as great as the action of cost upon price. There can be no doubt that competition not only reduces price, but that it also reduces cost. Economic necessity impels the manufacturer in a falling market for his goods to devise economies, and a railway company, confronted with a diminished revenue through falling rates or re-

¹ In the *Quarterly Journal of Economics*, 1891, Vol. V, pp. 438-465. Reprinted in "Railway Problems," ed. by W. Z. Ripley, Boston, 1907, p. 122, et seq.

duced traffic, must take similar measures. This is so well realized that in the fixation of prices and rates alike, economies are customarily anticipated.

The principle of charging on the basis of cost of service might be applied to some goods, but to a very large group, especially of raw materials, it could not be applied with any effect.¹

31. *Value of the goods principle*.—The principle of basing charges upon the value of the goods transported is more plausible; but when we examine the details of traffic history in different countries, we do not find that there is any close correspondence between rates and any expression of the value of goods, that is, the market value, the average value, or even a hypothetical normal price. In low-priced goods such as coal, the rate for long distances is sometimes a multiple of the price of the coal at the mine; but it is no definite multiple. So also in relatively high-priced goods the rates for a given distance may and do vary from a fraction of 1 per cent to one-quarter or more of the price at the place of shipment. Clearly if value is taken into account in fixing a rate, it is in a very vague and general way. There are in practice so many anomalies and inconsistencies that it cannot be held to have established itself as a principle in the fixation of rates.

32. *Value of the service principle*.—Rates based upon the estimated value or importance of the service which is rendered to the sender and receiver could not possibly be equal or uniform, for the value of the service varies almost with the individual. The adoption of it in passenger rates would be clearly absurd; and the adoption of it in freight rates would involve endless com-

¹ It may also be observed that the cost of service principle is associated with an archaic conception of value.

plaints of discrimination. Rates based upon this principle when exposed to competition would at once be deprived of any special character, and their originally underlying principle must rapidly disappear.

33. *Rate fixing in practice.*—We now come to a brief examination of the actual practice of rate fixing under conditions of competition. The customary explanation of the basis of railway rates is that they are “what the traffic will bear.” This doctrine has its historical origin in a celebrated dictum of M. Solacroup, director of the Orleans Railway Company in France, “In the matter of transport tariffs there is only one rational rule, viz., to ask of merchandise all it can pay; any other principle is no principle.”¹ According to the Report on French Railways by M. Waddington (1880) the application of this rule “proclaimed and defended by the great companies” brought about “the most startling inequalities in the charges of transport. Special tariffs of all kinds have the result of favoring some port, some industry, some productive center, some manufacturer, necessarily at the expense of other localities, regions or factories.”² It is open to doubt, however, whether the results described were due to the adoption of M. Solacroup’s rule, at all events in the crude sense in which it is often interpreted. The anomalies and inequalities complained of by M. Waddington were undoubtedly due to the variations in the competitive conditions. Where the railway had to meet the competition of water transportation the rates were low. Where there was no competition of any kind the rates were high.³

¹ Quoted in M. Waddington’s Report on Railway Tariffs to the French Chamber of Deputies, 1880. See translation in Report from the Select Committee on Railways (Rates and Fares) 27 July 1882. London, 1882, p. 445.

² Ibid.

³ This is shown very fully in the details in the body of the Report.

34. *Upper and lower rate limits.*—It is very obvious that a general scale of high rates is not necessarily the most profitable for a railroad company. Clearly the most profitable scale of rates is that which yields the highest net return. This result cannot necessarily be accomplished by a scale of high rates even where the conditions are monopolistic. The discovery of the point at which the highest net return is obtained, is inevitably a matter of experiment. The experienced railway manager knows when he approaches it, although it may be difficult to determine it precisely beforehand. The net return of a railway enterprise as a whole depends upon the nice adjustment of rates and not upon the exercise of monopolistic powers even when the railway company is free to exercise these. If the quantity of a commodity which can be offered for carriage is limited, if the railway is the only means of transportation, if the necessity of transporting the commodity is absolute, and if the resources of the sender or the receiver are such that this necessity can be met, then the railway company may fix (in the absence of rate regulation) any rate within the limits of these resources. Upon the other hand, if the sender is in a position of economic strength, i. e., if there is more than one means of transportation, or if transportation on any terms is a matter of indifference to him, and if the railway company is in the position of having to take the goods at the rate fixed by the sender or of allowing its line and its plant to lie idle, the sender may fix his own terms.

Both of these cases are unusual, although they sometimes occur; but all cases lie towards one or other of these extremes. If the sender is urgent the rate will be relatively high, if the railway is urgent the rate will be relatively low. Indeed, bargains about freight rates are

not essentially different from bargains about anything; the same principles of value really apply.¹

There is, however, another aspect of the problem of transportation as a whole. Transportation may be looked upon as a part of the process of production and the manufacturer or shipper may be regarded as the ally of and the coöperator with the railway in delivering his goods at the point of consumption. From this point of view the really important element is the character of the competitive field as a whole, the competition of the combined forces of railway and shipper with other similarly combined forces. This combination may be held always to have existed; but it has during recent years been brought into especial relief in America. It is indeed this combination which has given rise to individual discriminations and rebates and to the other incidents which have been exposed in many judicial and other inquiries. From this point of view, the formidable driving power behind the railways is industry itself, which appears to be becoming more and more strenuously competitive,² combinations, consolidations and trusts notwithstanding. Indeed, these combinations appear generally to have been entered into in order to make competition more severe. The number of individual competitive interests may have diminished; but the competitive field has become more vigorously and remorselessly contested. But consideration of competition is not exhausted by an ex-

¹ Professor Ripley, in his interesting articles in the *Railroad Age Gazette* (1909), suggests that the cost of the service constitutes a minimum and the value of the service constitutes a maximum. Rates cannot fall permanently below the one or rise permanently above the other. This must be true in the long run, yet in large classes of goods for long periods of time, the rate may fall below the cost of carrying the traffic or rise above a "reasonable" estimate of the value of the service.

² For interesting remarks on the competition of markets, see W. Z. Ripley, *Railroad Age Gazette*, May 14, 1909, p. 1035.

amination of the field from the point of view of the producer and carrier, there is also the point of view of the consumer, who in his own field is a competitor of other consumers. To put this in another way, there is the competition of localities, the building up of consuming centers and their competition with one another for industries, for population, for railway facilities, and the like. These groups of consumer-producers compete with one another in consumption as they do in production.

35. *Struggle between conflicting interests.*—In all questions regarding fixation of the railway rates it must be frankly acknowledged that there is not merely divergence of opinion, but divergence of interest. The interest of the Western jobber or wholesale dealer is not the same as that of the Western individual merchant, nor does the interest of either coincide with that of the Eastern jobber or manufacturer. When an "oppressed interest" appeals successfully against "unjust classification" or "unreasonable rates" some other interest must suffer. Sometimes the economic reactions are so intricate that it is quite impossible to follow them in their ramifications. When an industry which has established itself in a certain locality because of "natural advantages" finds these advantages neutralized in an economic sense by "differential rates," authorized even by the Interstate Commerce Commission, it not unnaturally regards itself as the victim of circumstances. It may indeed be held that the attempt which is now in full vigor to eliminate natural advantages and to "keep everyone in business" leads not only to a great deal of unnecessary transportation, an uneconomical result in a social sense;¹ but leads also, sometimes with the coöp-

¹ Cf. e. g., W. Z. Ripley, "Railway Rate Making in Practice," *Railroad Age Gazette*, June 11, 1909.

eration of other causes, no doubt, to the concentration of production in particular areas.¹ Moreover, authorized changes in classification and rates may sometimes result in domestic industries being placed at a disadvantage.² In the actual determination of rates by the railway companies and in the regulation of them by the state and Interstate Commerce Commissions, considerations of principle enter indefinitely. Sometimes the element of distance is considered and a rate is explicitly based upon distance; sometimes distance is eliminated. Sometimes the cost of service is represented as the reason why a rate should be high or low; sometimes the cost of service is neglected. The plain fact seems to be that neither of these elements is really effective in determining either particular rates or rates in general. Where rates are subject to competition they will be determined in the same way as any other competitive charges are determined; and where there is a quasi or complete monopoly, they will again be determined by the appropriate conditions.

36. *Expenses of transportation.*—While the principle of joint cost described above renders precise specifi-

¹ For instance, "in 1905, all the china, Delft and Beleck wares reported for the United States, were the product of Trenton, N. J. The first and last of these wares "were formerly manufactured at other places in America." See Bulletin 62, Census of Manufactures 1905, Washington, 1907, p. 61.

² A conspicuous instance of this is the case of The Union Pacific Tea Company v. Pennsylvania Railroad Company and others. The railway companies were charged with "Unjust classification" (in violation of Sections 1, 2 and 3), "upon German and Austrian china ware." This ware was "given away with a pound of tea," and on that account was ordered "to be rated nearer ordinary earthenware, even although it was shipped in the same manner as high grade earthenware." Cf. W. Z. Ripley, art. cit. June 18, 1909. It is clear that this decision tends to neutralize protection so far as high grade earthenware is concerned. See I. C. C. Report, Case No. 1569, 1908.

cation impossible, it is necessary in practice to arrive at some figure, often a merely arbitrary one (sometimes indeed explicitly called an "arbitrary") for each of the services which railway companies render to each other. Thus specification of constituent elements has crept into American rate-making. This occurred at an early stage, for prior to the comparatively recent consolidations there was need for understandings in relation to such matters between separate undertakings to a greater extent than is now the case.

In recovering through a rate the necessary return for outlay incurred the railway company must, if possible, provide for:

(1) Fixed charges. These charges are for interest and administration. They can only be distributed *pro rata* over other items of charge; they cannot be specifically assigned to individual elements. They vary in relation to the traffic, but not directly, and there is a minimum below which, traffic or no traffic, fixed charges cannot fall.

2. Operating expenses. (a) Maintenance of permanent way, signaling, etc. This is a very difficult element of cost to consider precisely; because the proportion of the cost which is debited against the revenue of the year and the proportion which is charged to capital account varies very much in practice and there is no common agreement as to the relation of the capital and revenue accounts.

(b) Haulage. The cost of locomotive service can without much difficulty be determined in such a way as to show the cost on a particular railway, of hauling one ton per mile at a given rate of speed over a track of a given condition and a given gradient.

(c) Car service. The cost of this service can also

be worked out in the same way, although the schedule must be a more complicated one than in the case of the locomotive, for it includes all of the elements in the locomotive case, excepting fuel, together with many others. The principal factors are speed, load, nature of the freight and continuity of the business.

(d) Terminals. The cost of terminals includes the provision of switching arrangements, yards, attendance, etc., with sometimes loading, unloading, covering and the like. A terminal in New York City will be much more costly to the railway company than a small terminal in the interior, but it may cost less per ton of traffic handled.

(e) Charges for "arbitraries" are imposed by other lines, on their part based upon cost or upon an arbitrary determination of the value of the service and are generally stable, without regard to the increase of traffic. Examples of these arbitraries are to be found in the charges per car and per passenger exacted for crossing the bridges at Poughkeepsie, Louisville, St. Louis and the International Bridge at Niagara, the bridges belonging to independent companies.

(f) Insurance. Insurance of the general undertaking or of large parts of it against fire and the like, forms a part of "fixed charges"; but insurance against damage forms a considerable item whether it is revealed or concealed in the annual expenses, as well as in the rate, assuming this rate to be composed of the constituent elements of charge. The difference between rates at owner's risk and those at company's risk is 20 per cent in the United States, and 25 per cent in Canada.¹ This represents insurance. That the amount of damage upon the American railways is not excessive is shown by the fact that by far the largest

¹ It used to be 50 per cent.

proportion of the traffic is sent by the owner at his own risk. He either takes upon himself the insurance or he pays for it to an insurance company. The liability of the railway company for damage to goods forwarded at company's risk is well established and most of the companies require to keep a large staff of clerks in their claims department. The cost of the claims department must be taken into account with the cost of insurance against damage in transit.

The total of the charges specified constitutes the rate from the point of view of net cost; but in practice, while this specification may be made for statistical purposes or for the purpose of detecting a suspected leakage of profit through disproportionately low rates, the total of the specified items does not necessarily constitute the rate. Where there is no competition the rate may be much higher and where there is competition, for the reasons explained above, the rate may be much lower.

37. Variations in transportation costs.—Returning to consideration of the bearing of specified items, it is clear that fixed charges and terminals, at least, are irrespective of distance, and a charge for them constitutes an initial charge to be considered as quite separate from those charges which depend upon distance. As regards haulage and car-service and the like, while these depend upon distance, it is not so clear that they depend upon distance directly or upon the mere fact of distance. They depend, for instance, importantly upon speed. The cost of haulage rises rapidly with the speed. They depend also upon the grade and upon the condition of the permanent way. No one who has ridden upon a locomotive can have failed to realize the difference of effort expended in running on different parts of the same line, the varying expenditures of steam with

every change of grade, and the varying vibration with every change of ballasting conditions.

For this reason a uniform rate per mile, even if it were devised in such a way as to return the whole cost of haulage, would involve a high charge where the road was level and a low charge where it was not level. It is quite true that under the pressure of a low uniform haulage charge the railway companies might be driven to diminish their grades in all cases where it might be possible, but it is not always possible, and the exceptions to a uniform rate would require to be very numerous to avoid discrimination against those parts of the country which enjoyed the advantage of being flat.

The further question arises, given the initial cost of starting, apart from terminals, does haulage for one hundred miles cost exactly five times as much as for twenty miles or for five hundred miles exactly five times as much as for one hundred miles, assuming the whole distance to be perfectly level?

When the element of terminals is eliminated and the preliminary loss of time and steam in starting and in getting up to maximum speed is taken into account, it is very doubtful whether a locomotive drawing a train of a given weight at a certain uniform speed over a line of uniform character upon an unvarying level, with equally distributed fuel and water, can perform the last mile of a given distance at a less cost than it can perform the first mile, or that it can perform a journey of one thousand miles at a less proportionate cost than a journey of five hundred miles. If it does so under the given conditions, the reason is not clear. Indeed, if the journey is a long one, owing to the fatigue of metals, and the wearing out of parts, the remoter miles must be traversed at greater and not less cost because of the

more rapid proportional rate of depreciation. When it is said that the long haul is accomplished at a less cost per mile than the short haul, what is meant is that when the terminal and fixed charges are deducted the margin of the total rate in the case of the short haul gives a higher rate per mile than in the case of the long haul; but this does not prove that the rate per mile for haulage is necessarily less for long than for short distances under conditions of perfect equality for purposes of comparison. The cost of terminals and of divisional points forms so large a proportion of the total cost, that the element of haulage over distance pure and simple is relatively of minor importance.

The prevalence of the "flat rate" ¹ has contributed to the idea that the long haul is conducted at less cost per mile than the short haul. In the "flat rate," however, the element of terminals is not discriminated, indeed in the fixation of the "flat rate" the question of cost is simply eliminated.

The cost of service, in so far as it can be worked out, may however be regarded as constituting, consciously or vaguely, the subjective estimate which the railway managers make of what the minimum rate ought to be. The rate as determined by competition and by other considerations, such as the desire to build up an industrial center, for instance, may be widely different.

¹ By "flat rates" in railway parlance, are meant rates which include switching and other terminal charges.

CHAPTER VIII

MUTUAL REACTION OF RATES AND PRICES

38. *Influence of rates on general prices.*—Among the economic effects of the development of railways an important place must be assigned to the effect upon prices. The subject cannot be said to have received the attention it deserves. Although copious statistics of prices are available, the influence of the several factors which determine price movements are not, as a rule, in any serious way explicitly discriminated. The theoretical influence of railways upon prices may be described as follows: The construction of a railway into a district previously without such means of communication tends to widen the market for local produce and thus to increase the demand for certain goods. This increase in demand, other things being equal, advances the prices in the localities in question. The effect of extension of communications upon central markets is to increase the supply of certain goods in these markets and thus, other things being equal, to lower the prices of these goods in the market in question. Similarly, low through rates enlarge the area of the market and tend in the absence of countervailing influences to increase local prices.

But a deficiency of local supply in relation to local demand may result in local prices being higher than export prices. In such a case exports will be checked and the fact of external communication will exercise no influence upon prices. Such a condition of matters existed in the fall of 1904 when, there being a deficiency

in the wheat crop, the prices in the local markets were higher than the export prices and very little wheat was sent abroad. When, however, there is a surplus over the local demand, local prices will be controlled by those of external markets within the country, and when there is a surplus of domestic production over the domestic demand, prices will be controlled by those of the markets of the world. This entrance into the wide market is under current conditions possible only where railway and steamboat communication make "the world one city."

So much for the general influence of the existence of railways upon prices. There remains to be considered the relation of rates to the prices of individual goods. As regards large classes of commodities, the railway rate has no apparent influence upon price. To these classes belong, for instance, all those goods whose price is customary.¹ Grocery goods put up in packages and sold for 10, 15 and 20 cents per package are sold at the same price universally, irrespective altogether of the cost of carrying them from one place to another.² An extreme case of this kind is to be found in the photographic goods manufactured by a certain celebrated firm and supplied at a uniform price throughout the world, so that at the par of exchange one may buy films in New York or in St. Petersburg at the same price. The explanation of this lies in the fact that the retail price of such goods, however moderate it may appear, leaves so great a margin over the cost of production plus profit, that the total cost of transportation when distributed over the whole output is fully provided for. It

¹ Cf. evidence of Mr. Lincoln, General Freight Agent of the Missouri, Pacific Railway, in "Hearings before the Committee on Interstate Commerce U. S. Senate," Washington, 1906, Vol. II, p. 1226.

² Assuming that the weight and contents of the packages really are uniform.

must not be supposed, however, that an increase in this cost would not reflect itself in the retail price, unless the latter were subject to local competition, provided the increase were great enough to affect materially the total net return to the manufacturer. The force of customary price may be held to be great enough to resist the pressure of small increments of cost; but not great enough to resist the pressure of large increments, the proportion of such increments to the total cost and yield being taken into account. This principle may be said to apply to all such cases. The effect would, however, really be determined by local competition or by the absence of it. In certain aspects, although not in all, a transportation rate is analogous to a tax and its incidence may be held to be subject to the same laws. If the price charged for a commodity is a monopolistic or rack price, the producer must pay the transportation rate as he must pay a tax similarly levied; if the price is fixed by competition, the consumer must pay. Thus since in the majority of cases the prices of commodities are fixed by competition, the tendency is for the consumer to pay the rate of transportation as he must pay a tax under similar conditions. There are, of course, various intermediate phases in which the rate and the tax are divided between the producer and the consumer.

39. *Influence of prices upon rates.*—While, as explained above, the introduction and increase of railway accommodation have contributed to the advance of local prices through the increase of the area of the selling market and to the diminution of prices in the central markets through the increase of the area of the purchasing market; and while, under conditions of fully developed transportation facilities, reactions of freight rates

upon prices may be expected to occur, it is nevertheless true that freight rates, like rent, are rather the effect of price movements than the cause of them.

Thus a transportation rate is high because the price of the commodity in question is high. To take an extreme case, let us suppose that the freight rate on building stone and on coal were equal, the price of coal would be relatively high in Wisconsin and the price of stone would be low—although the rates were the same—because stone is found locally and coal is not. The competition of allied merchants and railways in different coal-producing regions will determine the price at which they will offer coal in Wisconsin; and the competition between coal and other forms of fuel will determine the price which can be obtained for it there. This competition will fix the price and the rate as well. Thus price determines rate; rate does not determine price.¹ Yet, as pointed out above, rate reacts upon price through the extension or the limitation of the market.

A notable instance of the effect of a general advance of prices upon steamship freight rates occurred in 1853, when, owing to various causes, but chiefly to the greatly increased production of gold in California and Australia in the immediately preceding years, prices of commodities advanced rapidly. Immense movements of goods and passengers took place and steamship rates advanced also.²

It is obvious that a period of falling prices is that in which demands for reduced freight rates are most numerous and most insistent. When prices are falling,

¹ For a contrary opinion, see W. C. Noyes, "American Railroad Rates," Boston, 1906, p. 30.

² Many freights were doubled. Cf. W. S. Lindsay, "History of Merchant Shipping," London, 1876, Vol. III, p. 296.

the cost of transportation bears a progressively increasing proportion to the price and the diminution of the rate comes to be of increasing importance. When wheat is at \$1.25, a freight rate of 12 cents is of less importance to the shipper and to the consumer than when wheat is at 75 cents. Thus the periods of agitation about rates are always coincident with periods of falling prices. It is significant that the agitation about rates in America during recent years when prices have maintained a fairly high level has been mainly concerned with "equal treatment." If prices were to fall abruptly, the burden of complaint would rest upon high rates.

While, as explained above, the fixation of rates is in general affected by the value of the commodity, there is no close correspondence between rate and price. Commodities in the same class pay in transportation rates a widely varying proportion of their price.¹

¹ This is well illustrated in a table by Burton Hanson, General Solicitor, Chicago, Milwaukee and St. Paul R. Y. Argument, 1905.

CHAPTER IX

DISCRIMINATIONS AND DIFFERENTIALS

40. *Classes and methods of discrimination.*—Although discriminations and differentials are widely different both in law and in fact, they may be linked together for the purpose of exhibiting their difference.

Personal discriminations.—In the days before railways a carrier was bound to carry goods and passengers at a reasonable rate and sometimes this rate was specified by law or determined by justices of the peace; but there was nothing to hinder him from charging less than a reasonable rate to any person or even from conveying him and his goods gratuitously. He could not be called upon to do so to everybody; but so long as he charged a reasonable rate no one had any cause of complaint under the common law or under any statute regulating the business of a carrier. Undoubtedly under these conditions there was a great deal of discrimination or, as it is sometimes called, “undue preference.” Shortly after the railway system began to develop in Great Britain, however, a new rule was applied to railways. This new rule forbade preference. The Railway Clauses Act of 1845¹ prescribed that “no reduction or advance in any such tolls” (those levied by the company in accordance with their acts) “shall be made directly or indirectly in favor of or against any particular company or person traveling upon or using the railway.”²

¹ 8 and 9 Vict., c. 20.

² Cf. Section 90.

In the United States several states modeled their railway legislation upon this clause;¹ but the prohibition of discrimination, like many of the other provisions relating to railways in the early state legislation, was a dead letter. The states had neither the machinery nor the power, and sometimes they had not the will, to enforce it even within their own borders, and over interstate commerce, which was the more important, they had no authority.

There consequently emerged in practice, through the influence of competition between railways and between railways and other means of transportation, a long series of forms of discrimination—from annual presents to shippers or their employés to preferential rates and rebates of a more or less open character. When the Interstate Commerce Act² was passed it was thought that open discrimination would result in the managers and perhaps even the directors being sent at once to jail, and this idea is said to have had something to do with, as it were, driving preferences under ground. They became secret and disguised and perhaps worse than ever. Competition had to go on and this was the rut into which competition of this particular kind had dragged the railways.³ Partly through the influence of exposure, but perhaps more largely because the whole system was unprofitable to the railways, and because the railway companies as independent financial corporations were becoming galled by the servitude to the larger manufacturing corporations to which the system of preferences and

¹ Cf. Judge W. C. Noyes, "American Railroad Rates," Boston, 1906, p. 103.

² Approved February 4, 1887. Personal discrimination is prohibited under cl. 2.

³ The extreme point was between 1893 and 1895. Cf. Noyes, *op. cit.*, p. 119.

rebates had subjected them, these practices have now almost, if not altogether, ceased, and competition has taken other and more honorable directions. At all events, the subject no longer occupies the place in the public mind which it occupied prior to 1906. Up till that year the burden of complaints about rates was not that they were unreasonable in themselves, but that the published rates were not adhered to.

Local discriminations.—This form of discrimination involves the giving of lower rates to some localities than to others and in some cases, those, for example, in which there is only one important manufacturer of a commodity in an industrial center, it is difficult to distinguish from personal discrimination. The third clause of the Interstate Commerce Act recognizes this by repeating the prohibition of the second clause with regard to preferential treatment of persons and extending the prohibition to include undue preference in favor of localities or commodities. This clause is modeled upon the English legislation on this subject.¹ The words of the clauses in the respective acts are almost exactly similar. The prohibition is against “undue or unreasonable prejudice or disadvantage,” not against preference *per se*, and there is nothing either in the English or in the American act, even with the subsequent amending and supplementary acts,² to define the words “undue or unreasonable.”

No doubt there is advantage in elasticity in a statute of this kind; but a very difficult duty has been imposed upon the courts and upon the Interstate Commerce Com-

¹ Judge W. C. Noyes, *op. cit.*, p. 107. The English Acts were 17 and 18 Vict., c. 31, cl. 2 (1854), and 36 and 37 Vict., c. 48, cl. 11 (1873).

² These up to 1906, are reprinted in Appendix I of the Report of the Senate Committee on Regulation of Railway Rates, 1906, Vol. V.

mission in determining what is and what is not an "undue or unreasonable prejudice." It is quite easy to say that no person shall enjoy a preference of any kind, all rates must be equal to everyone from any one place to another; but it is not so easy to resist the pressure of competing localities which allege that their industries would be ruined unless they continued to enjoy a particular preference. "There is no necessary man;" but it appears that there are necessary cities and thus the particular form of discrimination which is known as "differentials" has taken its rise, seriously affecting the development of different cities.

41. *The "long and short haul" clause.*—Before discussing "differentials," however, it is necessary to notice briefly the controversy about "the long and the short haul." This controversy arose in consequence of the practice of railway companies of meeting competition by water or by other railway companies by charging a low rate to "competitive points," where the routes of different companies converged, and of charging a relatively high and sometimes an absolutely higher rate to intermediate points. Complaints about this practice were met by the railways with the statement that the intermediate rates were not only not unreasonable, but that they were lower than they would have been had there been no through traffic. Owing to competition a higher rate was not obtainable for the through traffic.

Prior to the passage of the Interstate Commerce Act in 1887 public opinion was much excited upon this particular department of the subject and in consequence of this the framers of the act undertook to deal with the question. The fourth clause of the act forbade a railway company to charge transportation for goods or passengers under substantially similar con-

ditions at a higher rate for a short haul than for a long haul. The proviso was added, however, that the Interstate Commerce Commission had power to suspend the operation of the act in certain cases, the nature of which was left to its discretion.

The Interstate Commerce Commission gave several decisions between 1887 and 1897 in which it held that while water competition might make conditions so dissimilar that the clause should not be held to apply to such cases; yet the competition of railways with one another should not be permitted to do so. The grounds upon which it made that distinction between the two kinds of competition were these: competition by water was conducted by vessels which were not subject to the provisions of the Interstate Commerce Act, the water carrier was not obliged to publish any schedules of rates, he was free to take freight at any price he pleased. But all railways within the country were subject to the act and, therefore, their competition with one another did not create dissimilar circumstances. Railways in foreign countries (the notable instance being the Canadian Pacific Railway) could make the conditions dissimilar as in the case of water competition. The test case in this connection was that of the Alabama Midland Railway Company. The original complaint was brought by the Board of Trade of Troy, Alabama, on the ground that Troy was subjected to undue prejudice by the rates on cotton to Savannah, these rates being higher than those from Montgomery, which is fifty-two miles west of Troy, the cotton from Montgomery having to pass through Troy on its way to Savannah. The Interstate Commerce Commission decided against the railways; but on appeal to the Supreme Court the decision was reversed on the ground that railway competition might

create conditions as dissimilar as any other.¹ This decision did not, of course, affect the application of "the long and short haul" clause to cases where competition was not clearly proved; but it certainly facilitated the fixation of "basing points" and it led to a general disregard of the clause, especially in the South.

It should be observed that in 1903 the Elkins Law made the railway company as well as its agents liable to criminal prosecution for infringement of the provisions of the Interstate Commerce Act.²

42. *The Atlantic port differentials.*—Differentials are discriminatory rates by certain routes to certain places, which are recognized by the Interstate Commerce Commission as being differences in favor of these routes and places, not of the nature of undue preferences. From the railway point of view the rationale of the differentials is that by means of them the longer and slower routes may be controlled. The alternative to differentials from this point of view is cut-throat competition. From the point of view of the city to which the differential rate is available, the rate constitutes a compensation for the absence of natural advantages which other cities engaged in similar business possess.

The most important of the differentials are those to some of the Atlantic ports—Boston, Philadelphia and Baltimore—all of which are presumed to enjoy inferior advantages as shipping ports to New York, and all of which therefore demand a recognition of this in their rates to interior points. The subject is a very intricate

¹ Cf. accounts of this case in *I. C. C. v. Alabama Midland R. Co.*, 168 U. S. Rep. 144. *I. C. C. Reports* 1897, p. 38; *I. C. C. Decision* Nov. 8, 1897; and in W. C. Noyes, "American Railroad Rates," Boston, 1906, p. 113.

² Judge Noyes attributes much importance to this act in diminishing discriminations. *Op. cit.*, pp. 116, et seq.

one; and it therefore cannot be fully treated here.¹ The gist of the matter is that, chiefly owing to concentration of population, banking facilities as the central money market of America, docking facilities and relative certainty of obtaining freight, New York, in spite of its relatively high dockage and lighterage dues, attracts a much larger amount of shipping than any other port on the Atlantic Coast. It thus attracts the traffic intended for export. The argument of the other ports is that if trade were left to its natural channels, no one would ship through them and all traffic would be sent through New York, with resulting complete concentration of the export business there.

Up till 1905 the freight on goods from the West to Baltimore, Philadelphia and Boston was less or more than that to New York by the following differentials: Domestic traffic, 3 cents less to Baltimore and 2 cents less to Philadelphia; and 7 cents first class to 2 cents sixth class more to Boston; export traffic, the same as the domestic traffic to Baltimore and Philadelphia except on grain, iron and steel, which were 1½ cents less to Baltimore and 1 cent less to Philadelphia; on this traffic the rates to Boston and New York were the same. On grain transported by the lake through Buffalo, Fairport and Erie there was a differential in favor of Baltimore of 0.4 cent per bushel below the rate to New York; but no differential in favor of Philadelphia.²

The Interstate Commerce Commission made an official inquiry into the subject of port differentials and on April 27, 1905, issued its decision after hearing representatives of the commercial interests of New York,

¹ The best treatment of the subject is in the Senate Report on the Regulation of Railway Rates, 1906, Vol. V, Appendix E, pp. 407-643.

² I. C. C. Opinion No. 746, April 27, 1905. See Regulation of Railway Rates Hearings, etc., Washington, 1906, Vol. V, p. 601.

Baltimore, Philadelphia and Boston and of the railways concerned. New York and Boston advocated the abolition of the differentials in favor of Baltimore and Philadelphia. By general agreement the differentials upon domestic traffic were excluded from consideration, as were also the rates upon import traffic. The sole matter dealt with was that of the differentials upon export traffic. The result was that the differential on flour, all-rail and lake-and-rail, was fixed at 2 cents per hundred pounds at Baltimore and 1 cent at Philadelphia. The differential on grain was reduced to 0.3 cent per bushel for Baltimore and Philadelphia alike. Otherwise the export differentials were left as they were.

The discussion of differentials is particularly interesting because it opens up by far the largest questions in connection with freight rates, involving not merely railway, but ocean, rates. The character of ocean traffic renders the rates by steamship much less stable than rates by rail may readily be. While the unit of haulage by railway is the car load, not necessarily of more than twenty thousand pounds, the unit of transportation by ship is a shipload, frequently as many tons. The ship is in the position of an urgent and immediate seller of space. Indeed, if the ship cannot sell its space, it must buy cargo for ballast, because its stability depends upon its load, a cargo vessel being designed to carry a load, not to sail empty. If sufficient freight does not offer itself at a normal rate, it must be obtained and obtained at once at an abnormal rate. This condition of affairs renders through rates from interior points to the coast and from thence to destination by ocean, very unusual. The grain shipper ships his grain to a port and then makes his bargain for what freights are offering. He will send his grain to the port where he is likely to

find most shipping unless he has some inducement to do otherwise. It was alleged at the hearings before the commission that the differentials were simply added to the ocean freight and that they really constituted an additional profit to the ship-owning companies.¹ This may be so, but convincing proofs of such a condition in general have not been forthcoming. Even if such were the case, it is undoubtedly very difficult to set aside the argument that on the strength of the differentials and on the faith of their continuance, Baltimore and Philadelphia have created facilities for ocean shipping which would not have otherwise existed, and a sudden deprivation of the differentials before the trade had become thoroughly established might be disastrous to it. This is the old argument of protection for infant industries; and it is subject to the same considerations, favorable and unfavorable.

Other instances of differentials are to be found, e. g., in connection with package freight, by the Central Vermont line between New York and London and via Montreal by Grand Trunk Railway to Depot Harbor, etc., on Georgian Bay, thence by the Great Lakes to Chicago.² This differential is 10 cents less than standard rate for first class. For example, if the standard rate were 75 cents, this rate would be 65 cents.

Another example is that of the boat line to Norfolk and thence westwards and even northwards by the Southern routes. This differential is also 10 cents per hundred pounds for first class.

43. *Practical hints on rate comparison.*—Let us as-

¹ Report, Vol. V, p. 611.

² This traffic is conducted at a low price because the principal traffic by the route is eastbound grain for export. Goods are, of course, conveyed through Canada in bond.

sume that an enterprising manufacturer has found himself attracted by the local advantages of a particular center and has decided upon a site for a factory for the manufacture of a particular commodity, the raw material of which is to be obtained conveniently; and let us assume that nothing remains to be settled excepting the question of a market outside the immediate center of his operations. What is his next subject of inquiry? He must begin by an assumption and must then pass to some studies which he must master, unless he is prepared to trust the outcome of his enterprise to the chapter of accidents.

1. He must assume that the existing railway rates are reasonable and he must base his calculations upon them. If he can obtain concessions, good and well, but he cannot count upon his being able to do so.

2. He must consider where his market is going to be and then find the rates for the transportation of his product to that market. He must study the classification schedules and also the commodity rates, if necessary, and make all possible inquiries about competing lines and shipment to the competing points on different routes which may lie between him and his market. If water transportation is available he may find it economical to take advantage of that. He must consider also the relative advantages offered by different routes in respect to facilities and time occupied in transit.

3. He must consider carefully the question of packing, for some lines demand one kind of package and some another and the classification of his goods as well as their safety in transit and their weight and therefore the cost of their transportation will depend upon this element.¹

¹ See, for example, the articles on Packages in "Industrial Canada," Toronto, January, May and July, 1909.

4. He must then find out where his competitors are and what are their rates to the point of consumption. If his rates are greater than theirs, he must suffer the loss of the difference; if, on the other hand, his rates are less than theirs, he may be able to offer his goods at a slightly lower price than they can.

The rate question is inevitably an intricate one; but it must be part of the business of the shipper either to study rates for himself or to employ some one else to do so. Large firms have in their employment sometimes highly-paid traffic experts, most of whom have previously been in the employment of the railway companies and have thus a knowledge of the technique of the business. If, for example, a shipper does not watch carefully the changing conditions of classification and if he does not notice the position in classification of articles related to the one he produces, which may enter into competition with his goods, he may find later that he has been subjected to what he considers an "unjust discrimination." Yet this discrimination would arise entirely from his own fault. Much assistance is now afforded to the smaller shipper, especially, by traffic experts, who are frequently employed by chambers of commerce, boards of trade, business leagues and manufacturers' associations. Even the question of competitive markets, which is very closely connected with the question of transportation, has its experts employed by these associations for the benefit of their members.

CHAPTER X

MANAGEMENT AND REGULATION OF RAILWAYS

44. *Slackness of American regulation.*—In respect to the regulation and control of railways otherwise than as regards rates, there can be no doubt that public opinion in the United States has been less insistent than it has been in many other countries. The state railroad commissions have not, as a rule, been endowed with powers giving them an oversight of the physical condition of the roads. Some of the commissions have indeed drawn attention to inadequate provisions for the safety and comfort of passengers, although they have not the power to remedy these deficiencies.¹ The Interstate Commission has certain powers in this connection, but it has been occupied almost exclusively with rate questions, although its influence upon signaling of trains, interlocking switches and couplings has been salutary.

While the important trunk lines and principal terminals are unrivaled in their equipment and imposing splendor, the wayside station in America is not to be compared to the similar station in Germany or even in Finland, for instance. This is partly due to the necessity under which the railways have labored during the past thirty years of improving their tracks in the first place;

¹ For example, the Railroad Commission of Arkansas: "At some points which we do not care to particularize, the depot buildings are small and incommodious when compared with the volume of business being done. The so-called "waiting rooms," by their scanty furniture, want of ventilation, total disregard of ordinary cleanliness, and foul odors, render them unfit for occupation, a menace to public health and an incubus upon the progress of the towns in which they are located." First Report, p. 41.

but it is partly induced by the easy-going acceptance by the public of conditions which are not manifestly felt to be uncomfortable, merely because they are customary.

45. *Improvement in service of American railways.*—As regards the tracks, however, enormous improvements have taken place, especially during quite recent years. Rails have increased in weight,¹ the permanent way has been better ballasted, and mere age has given it solidity. In addition to these betterments, the wooden trestle has almost disappeared and the safety and convenience of operation have been vastly increased by the growth of the double track. The increase of mileage in double track is more than double the increase of single track, as may readily be seen from the accompanying diagram (No. III). Taking the year 1890 as a starting point, the mileage of double track and over has increased up till 1907 by 133 per cent, while the single track mileage has increased by only 38.4 per cent.

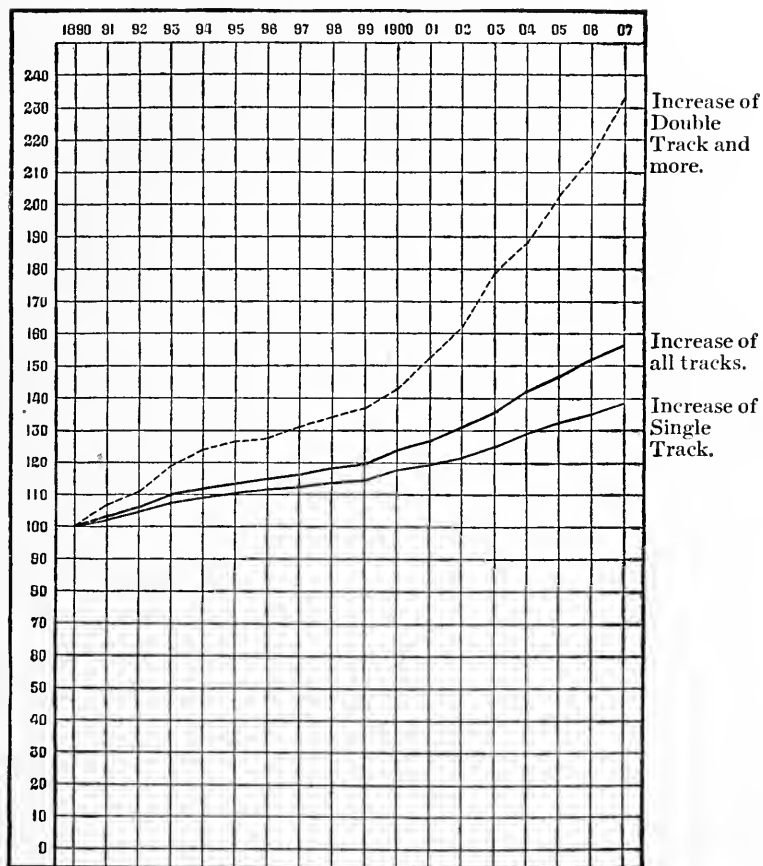
The shortage of cars, although a frequent grievance in the United States,² has not been a pressing problem

¹ Statistics on this important point for the whole of the railways in the United States are wanting; but the following figures illustrate the changes which are going on:

Weight of rails in lbs. and percentages of track.

		96	90	85	80	76	75	70 and
		under						
Union Pacific Railway.	1905	...	0.36	0.79	25.78	...	8.15	64.92
	1906	...	4.15	0.77	29.58	...	7.99	57.51
	1907	...	8.44	0.68	27.68	...	8.22	54.98
Southern Pacific Railway.		0.23	0.20	...	32.10	4.06	18.38	45.03
		0.22	1.24	...	31.44	3.33	19.81	43.96

DIAGRAM III



during the past two years, owing chiefly to the falling off in business. Large numbers of idle cars have remained in the yards of the railways. But when pressure comes with a good crop the shortage of cars will be felt again. It is, however, very doubtful if the maximum economy is exercised with respect to cars. The total statistics of cars and car mileage show a movement of cars of only about twenty miles per car per day.¹ This suggests an enormous waste of time of cars, for in little more than one hour of the day the car must be hauled the whole length of its journey for the day. This enormous demurrage has two very important effects:

1. It reduces the earning power of the car to a small fraction of its possible earnings and thus reduces the net earnings of the railway.

2. It very greatly retards the velocity of return to commercial capital in the country at large. It is clear that if a car load of goods takes a fortnight to perform a journey, which the technical means of haulage permit of being accomplished in two days, the capital invested in the goods is locked up in them for at least twelve days longer than there is any need for. Moreover, disappointment at non-delivery at the expected time frequently leads to cancellation of orders; and uncertainty of delivery of goods from distant points compels the merchant to keep much larger stocks than he would otherwise have to keep. This means more rent, insurance and interest than he would otherwise require to pay and means the locking up of commercial capital with inferior rapidity of turnover.

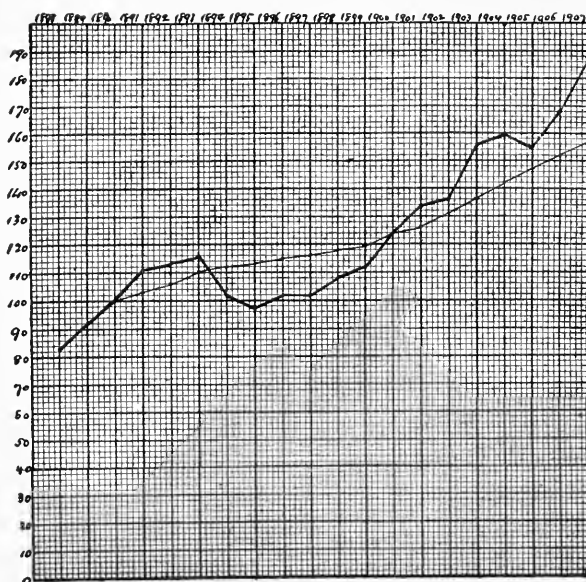
credit of \$50,000,000 for increased car accommodation. See E. A. Pratt, "German v. British Railways," London, 1907, p. 55.

¹ It is not a little remarkable that this rate of progression, twenty miles per day, is precisely the rate which a careful driver gets day in and day out from a team of oxen in an ox-wagon upon a prairie trail.

The earnings of railways in the United States appear also to be affected by the locomotive situation. It is reported that each locomotive, after having performed about twenty-eight thousand miles, requires to go to the repair shop, where it probably has to wait for a few days before repairs begin to be executed upon it. Since the mean journey of a locomotive may be set down at rather less than five hundred miles per day, the distance mentioned above as the total journey of a locomotive would give about two months as the period of active life of a locomotive without workshop repairs. Whether this somewhat inferior economy is due to defects in design, in workmanship or in daily management by the locomotive engineer, may be left to technical experts to determine. On the face of it there is need of economy somewhere. In this case again the return to the capital invested is much less than it might be.

46. *Railroad accidents.*—The statistics of the Interstate Commerce Commission reveal the startling fact that the number of persons killed and injured on the railways in the United States is increasing, not only at a greater rate of increase than the track mileage, but a greater rate of increase than the number of passengers. (See Diagram No. IV.) It may be that the statistics are more carefully compiled than they were formerly, but the absolute numbers are great enough to cause alarm. In 1907, 4,534 employés lost their lives on railroads, and 610 passengers and 6,695 other persons, in all 11,839 persons were killed. Of injured there were employés, 87,644; passengers, 13,041; and other persons, 10,331; in all, 111,016 persons injured. While the number of passengers has increased since 1890 by about two and one-half times, the number of killed and injured passengers has increased about four times.

DIAGRAM IV



Percentage increase of total number of persons killed on U. S. Railways, in 1890 = 100.

Percentage increase of Total Mileage of Track in 1890 = 100.

Collisions are the most important single cause, derailments coming next. The first caused the death of 214 passengers and injury to 4,294; the second caused the death of 162 passengers and injury to 3,819. The record of over 120,000 persons killed and injured on the railways of the United States, exclusive of street railways, be it remembered, is not agreeable to contemplate; yet it is difficult to compare this figure fairly with the similar statistics of other countries. The mere magnitude of the operations counts, for something. Even this large number of 120,000 persons is, after all, only 15 per 10,000 persons carried. The figure is, however, relatively high.

47. *The regulation of railways in Canada.*—The railways of Canada have practically all been built with state aid, either by way of government guarantee of bonds, of cash bonuses, or of grants of land. In addition some railways have been granted exemption for a time from taxation and some have been granted concessions and bonuses by municipalities. Government aid has been granted both by the Dominion Government and by the provinces since confederation; prior to confederation, by the provinces separately.

“To the Canadian provinces the question presented by transportation was not how to deal with the evils of the system, but how to obtain rapid development.”¹ In general, Canadian legislation has followed the example of England in the earlier, and of the United States in the later stages. The circumstance, however, that even yet the railways require to come before the Canadian Parliament very frequently for assistance or consideration,

¹ Prof. S. J. McLean (now one of the Dominion Railway Commissioners), in Reports upon Railway Commissions, etc., Ottawa, 1902, p. 33. In these reports there is an excellent summary of railway regulation in Canada up till 1902.

gives the public authority a power over them which does not exist either in England or in the United States. On the other hand, the necessity which exists of making railway enterprise in Canada attractive to the investor in Great Britain and elsewhere and therefore of making railway property and earnings secure against hostile legislation has tempered to a considerable extent the zeal of railway reformers.

The control of railways in so far as it was attempted by the legislature was entrusted to a Parliamentary Committee, which dealt with all railway bills and reported upon them to the Railway Committee of the Privy Council and to the Railway Department, which was presided over by a cabinet minister. In 1899, the Minister of Railways entrusted Professor S. J. McLean¹ with an inquiry into the rate grievances which had developed in Canada and into the working of railway commissions elsewhere. Professor McLean urged strongly the creation of a railway commission and in 1903 his suggestion was adopted and a railway commission was appointed with powers similar to those of the Interstate Commerce Commission, but in some respects more extensive. Under this act the railways may fix their own standard freight tariff subject to the regulation of the commissioners, but when this tariff is published, as it must be, it obtains the force of law. When a classification is once published it cannot be altered without notice (three days' notice of reduction and ten days' notice of advance).² This notice must be given

¹ Then Professor of Political Economy in Leland Stanford University. A commission had been appointed in 1888 to inquire into the same subject and had advised delay until the results of the appointment of the U. S. Interstate Commerce Commission became manifest. See Report, Ottawa, 1888.

² In the United States thirty days' notice of advance or reduction are required.

to the Board of Railway Commissioners, whose secretary then sends intimation of changes to the principal mercantile organizations,¹ the Canadian manufacturers' Association, the leading boards of trade, etc. These bodies, or any one of them, may file objections. If the board does not see its way to deal with them, there is a "hearing" at which the railway companies and the objectors are represented. In addition to giving notice of changes in classification the railway companies are required to forward their reasons to the board; but these reasons are not made public unless the railway companies choose to do so. Notices of advances in the standard freight tariff must also be published in the *Canada Gazette* in two issues before they take effect.

A few important points have recently been brought before the commissioners, some of which may require an amendment in the Railway Act prior to action by them. Among these are the question of owners' risk. Although the number of commodities which are carried exclusively at owners' risk has been greatly limited,² and although now the nature of this risk is quite clearly defined, the burden of proof rests upon the shipper. It is proposed that the burden of proving freedom from this risk should be placed upon the company. The question of charges for interswitching has been also recently occupying the attention of the commission and has been ruled upon.³

¹ Practically all the shippers in Canada belong to one or other of these organizations.

² In 1907 about two hundred and fifty such commodities were taken from this list.

³ See an excellent and exhaustive Memorandum on this point by Mr. J. E. Walsh, Manager of the Transportation Department of the Canadian Manufacturers' Association, 1908.

CHAPTER XI

NATIONALIZATION OF RAILWAYS

48. *Government ownership in continental countries.*
—It is a commonplace to say that the answer to the question of the nationalization of railways depends upon the place and the moment. Railways are well and ill-administered under private ownership in some places and under public ownership in others. The financial and other conditions of a country at a particular moment may render railway nationalization possible or impossible. What may be an expedient policy at one time may be inexpedient at another, and so on. It may be useful to indicate briefly why some countries have adopted the policy of national ownership of railways and why others have not done so.

In Russia, where the state has been powerful and where there has been, comparatively with the population, slender accumulation of commercial capital, political, military and commercial considerations alike determined that the state should take upon itself at least the major share of the tremendous task of railway construction in a region larger than the United States and Canada combined.

Germany purchased her railway system and nationalized it after the Franco-German War under a very unusual concatenation of circumstances. This consisted in the synchronous appearance and coöperation of a number of important factors, the coincidence of which brought about the result. Among the more influential

of these were the following: A powerful minister, Bismarck, imbued with the idea of the establishment of the authority of the new German State upon a basis of pervasive control and regulation of all the national activities, political and economic alike; a freshly excited feeling of national unity; a reorganized system of public finance and credit rendered easy by the immense addition to the liquid resources of the country by the unexpectedly speedy payment of the war indemnity by France; a greatly stimulated commerce, the consequence of the latter; the plea of military necessity; and the habit of submission to state regulation, which is characteristic of the German people. These were the principal factors in the successful nationalization and subsequent working of the German railways. The operation of taking over the capital indebtedness of the railways, although large, was by no means of such magnitude as would have been a similar operation either in Great Britain or in the United States. The total capital of the German railways in 1888, when the operation was long completed, was slightly over one-half of the capital of the British railways at that time, and slightly over one-quarter of the capital of the United States railways also at that time. In such cases the magnitude of the operation in relation to the circumstances of the time is an essential factor. Opinions differ about the influence of the German railways upon the economical development of the country. The past few years of great industrial prosperity cannot be attributed wholly to the state operation of railways; but that the railways have played an important part in it cannot be gainsaid. The German shippers, however, are not enthusiastic on the subject. A memorial sent (October 15, 1906) to the Minister of Public Works (in whose department the Prussian State

Railways are administered) by the most important commercial association in Germany,¹ after quoting the promises that had been made when the administration of the railways was assumed by the state, to the effect that rates should be reduced, especially upon commodities of low value, pointed out that these promises had not been kept and that the increasing surpluses from the railway department which were absorbed by the general finances of the State were assuming proportions which they "viewed with concern."²

Italy constructed a considerable part of her railway system under adverse circumstances. Commercial and public credit were alike low, the railways were not only not remunerative, but they did not meet operating expenses. The drain upon the treasury became very heavy. In accordance with the recommendations of a commission, whose report is a classical document in railway economic literature,³ the Government leased the national lines to two companies from July 1, 1885, for sixty years, with the proviso that at the expiry of twenty or forty years, at the option of either party, the lease might be terminated. When the first period of twenty years expired in 1905, the Government took advantage of this proviso and resumed operation of the railways. The rehabilitation of the currency which had taken place in the interval and the re-establishment of Italian credit, together with the greater prosperity of the country, may now enable Italy to overcome the difficulties of public operation with which formerly she was unable to cope.

¹ The "Centralverband Deutscher Industrieller."

² Quoted by E. A. Pratt in "German v. British Railways with special reference to owner's risk and traders' claims," London, 1907, p. 50.

³ *Atti della commissione d'Inchiesta sulle esercizio delle ferrovie Italiane*, 7 vols., Rome, 1881-1884. For a short digest of three of the volumes of the Report, see Hadley, "Railroad Transportation," New York, ed. 1896, p. 219.

49. *British colonies*.—In countries which have been, in effect, colonized since railways were introduced, as Canada, Australia and South Africa, the expediency of developing the regions by means of railways constructed in advance of the current requirements alike of population and of commerce, rendered it inevitable that the railways should be constructed either by adventurous external speculators or by the respective governments. Both expedients were adopted. Difficulties of a more or less serious character have been encountered by many of the state railway enterprises. Victoria (Australia)¹ found her railways a serious drain upon her resources under political management and appointed a non-political board with a competent technical manager² with full powers to manage the lines. The new arrangement came into force in 1903–04; and immediately resulted in large savings—a deficit of over \$1,000,000 (in 1902–03, owing partly to a strike of enginemen, over \$1,800,000) was converted into a small surplus.³ In South Africa, the railway situation is very complex. The interests of the several colonies are divergent; those of the Transvaal are favored by a short haul from the coast, while those of Cape Colony are favored by a long haul overland.⁴

The experience of Canada in state ownership of railways has, as a rule, not been fortunate. The first trans-

¹ A good critical account of the Australian railways is to be found in Moritz Kandt, "Ueber die Entwicklung der australischen Eisenbahnpolitik," Berlin, 1894.

² The manager they appointed was Mr. Thomas Tait, formerly of the Canadian Pacific Railway.

³ Report of the Victorian Railway Commissioners, Melbourne, 1905.

⁴ There is an excellent account of the South African railway situation in "South African Railway Unification and its Effect on Railway Rates" (printed by authority), Cape Town, September, 1907. (Appended to a Memorandum by Lord Selborne, High Commissioner.)

continental line in that country was projected and partially carried out as a state enterprise; but it was afterwards transferred to the Canadian Pacific Railway Company with a bonus of twenty-five million acres of land and \$25,000,000. One of the conditions of confederation, which took effect in 1867, was the construction of a line to connect the maritime provinces with the city of Quebec. This line, the Intercolonial, passes through a route which from the beginning has been unremunerative. Up till the present time the line has involved the treasury in annual deficits. A proposal has recently been made to follow the example of Victoria and to hand the line over to a non-political commission. The Dominion Government has recently embarked in another scheme of state ownership without state operation, the result of which remains in the future. A Government line, under the control of a commission, is being constructed from Moncton in New Brunswick to Winnipeg, Manitoba. When it is completed this line will be leased to the Grand Trunk Pacific Railway for fifty years, the rent charge, which is based upon the cost of construction, beginning ten years after the company enters upon occupation.¹

The Province of Manitoba purchased a line between Winnipeg and the United States boundary from the

¹ The principal documents in connection with the agreement between the Dominion Government and the Grand Trunk Pacific Railway are as follows:

1. An act respecting the construction of a National Transcontinental Railway (Dominion Acts), 3 Edw. VII, c. 71. (Contains the original agreement.)

2. Supplemental agreement, Sessional Paper No. 37A, 1904.

3. Proposed alterations to contract. *Ib.*

4. The Railway Act, 1903, 3 Edw. VII, c. 58 (General).

5. Debates in Canadian Hansard, chiefly March 30 and April 5, 1904.

6. Act authorizing a loan to the G. T. P. Rly., 9 Edw. VII c.

Great Northern Railway and subsequently leased it to the Canadian Northern. The Province of Ontario has been singularly fortunate in the only enterprise of this kind which has been undertaken by it. The Temiskaming and Northern Ontario Railway, which runs from North Bay into the Cobalt mining region, has, in consequence of the opening up of that region, been a successful line from the beginning. It is operated by a commission appointed by the Ontario Government.

50. *Great Britain*.—Long before the railway epoch there was in Great Britain a vast accumulation of commercial capital ready to be plunged into any kind of enterprise that promised profit. At the time when railways began to be developed, 1830–1840, the country felt secure in a military sense. The fear of invasion had passed away at Waterloo, and no military considerations existed to induce her to embark in railway construction as a state enterprise. The contemporary attitude of *laissez-faire* gave no impulse towards state enterprises on social or political grounds and thus it was quite inevitable that the development of the railway system should be left to private initiative, which was moreover both able and willing to undertake it. An act of Parliament, passed in 1844,¹ provides for the purchase by the Government, at any time after 1865, on the authorization of Parliament, of any railway constructed after the beginning of the session of Parliament in which the act was passed at twenty-five years purchase of the annual profits of the railway. These powers have never been exercised and the subject fell into abeyance until the year 1909, when it was revived,² although no definite scheme for the purchase of the railways has as yet been

¹ 7 and 8 Vict., c. 85.

² See below.

brought forward. The only railways belonging to the British Government are light railways in rural districts in the west of Ireland.

51. *United States.*—In the United States between 1830 and 1840, when railways began to be constructed, there was a slender accumulation of commercial capital and a relatively weak centralization of power in the hands of the Federal Government. The several states were jealous of their rights under the Constitution and, although the financial credit of the Federal Government stood high, there were strong political reasons why it should not embark in an experiment which might bring its interests into conflict with those of the several states. No individual state was at the time financially strong enough to undertake state railways on its own account, even if there had been any general desire that it should do so. The construction of railways thus fell to be carried out by the coöperation of two relatively weak powers—the power of private capital, on the one hand, and the power of state credit based upon state lands, on the other. The consolidation of the railways, irrespective of state boundaries, which has already, as we have seen, gone far, has greatly increased the difficulties of separate state ownership; and although the constitutional obstacles to Federal ownership of the railways may not be insuperable, an unusual combination of political and economic conditions would have to precede any serious attempt to transfer the administration of the railways to the nation.

52. *The present situation.*—The above historical recital shows that the railways were constructed by the state or left by it to private initiative for reasons connected with the political and economic circumstances of the time, rather than for reasons arising out of theories

of functions of the state. The only country which, at the time when railways were introduced, was practically free to choose between state and private operation and ownership, was Great Britain. That she left the railways to private initiative was due partly to the anxiety on the part of private adventurers to embark in railway speculation and partly to the reluctance of the Government, in accordance with the general state of mind at the time, to enlarge its functions. To this extent it may be allowed that theory determined policy.

Since then, however, many things have happened. The modern state appears with greatly enlarged functions in many directions. It is by no means a stranger to industrial enterprise, or at all events, to industrial organization. Moreover, the expense of government has increased enormously.¹ Among the expedients for raising revenue it is not surprising, therefore, that finance ministers should turn to the revenue to be derived from a profitable industry which might readily be converted into a state monopoly. Precisely in this way did the municipal administrator of about 1870² try to find in municipalization of gas and water a means of providing for the increasing expenses of large cities due to the cost of sanitation, civic improvements, etc. This is the reason why the subject of nationalization of railways has now emerged in England.³

Perhaps some weight ought to be attached to the propaganda of socialism; but so far as railways are concerned this is not obvious. Although the nationalization

¹ Treasury surpluses and deficits have in recent years equaled the total revenue of the Federal Government in 1863.

² Mr. Chamberlain in Birmingham, for instance.

³ For a dispassionate discussion of the present position of the subject, see Sir George S. Gibb (General Manager of the North Eastern Railway), "Railway Nationalization" (London), 1908.

of railways would, of course, be quite in consonance with a doctrine which demands the nationalization of everything, the intricacies of the railway problem cannot be said even to be approached by socialist writers.¹

¹ Even Karl Marx, whose passion for detailed analysis was very great, seems to have been deterred by "volumes of classification." He deals with Transportation in a few pages. See "*Das Kapital*," Vol. II, Hamburg (3rd ed.), 1903, pp. 120-123.

QUIZ QUESTIONS

(The numbers refer to the numbered sections in the text.)

PART I: BUSINESS ORGANIZATION

CHAPTER I

1. What was the original meaning of the word "Business?"

2. What did the early economic man lack in order to make his labor effective?

3. What relation has surplus wealth in various communities to commerce?

4. How did the proportion of capital compare with labor in the period of the town economy?

5. How did specialization affect the industrial development of the town? How did the growing demand for goods affect the organization of the guilds?

6. Why is the handicrafts system sometimes characterized as a system of custom production?

7. From what point of view is industry regarded when its organization is referred to as the domestic system?

8. Describe the conditions under which the middleman made his appearance. Point out several things which show how industry was gradually changing its organization in the latter part of the Eighteenth Century.

9. What was the chief function of the manufacturer during the latter period of the domestic system? Why

was it that business men were seldom ruined completely during a financial crisis? What economic argument did the parliamentary committee offer in justification of the merchant's position?

CHAPTER II

10. What is the problem of each nation relating to the disposition of the industrial surplus? What principle governed the colonial policy of nations in the Eighteenth Century?

11. What was the first great gain in cheapening production?

12. Name the consideration which may counterbalance the technical efficiency of machinery. What were the essential elements in the change from the domestic to the factory system? What effect did machinery have upon the methods of labor?

13. Under what conditions did the partnership form of organization originate? Name the advantages of the corporate form over the partnership form from the point of view of business organization.

14. When did large-scale production become the prevailing type of industry? Name the largest corporations in the United States.

15. In what four directions has the division of labor manifested itself? Illustrate by reference to some modern industry the great savings that are being made in the cost of production.

16. What characteristics pertain to the territorial division of labor?

17. Why are specialization and coöperation closely associated?

CHAPTER III

18. Give the essential attributes of a market. Describe the simplest form of market.

19. What peculiar feature is there in connection with the Antwerp grain market?

20. Market prices are the resultant of what influences?

21. What is the function of the speculator, the jobber, the broker?

22. How does the handling of raw materials differ from the distribution of manufactured products?

23. Why does speculation associate itself with the markets for raw products more than with the markets for manufactured goods?

24. What are the chief points pertaining to the custom of "set off" in the decision of the Supreme Court of the United States, May 8, 1905?

25. Into what two parts may a market be divided?

26. Why is grading of a material necessary in order to establish a broad market?

27. Why is the warehouse receipt an important document in the grain trade?

28. What is a contract grade of wheat? Why should an inspector of goods by whose decision a grade is established be closely watched?

CHAPTER IV

29. Name the various interests which use the Chicago Board of Trade as a market place in buying and selling wheat.

30. What is the business purpose of the corporation

known as the Chicago Board of Trade? What are the two principal kinds of transactions on the exchange?

31. What are the chief sources of orders which are received by the brokers in the future markets?

32. Define hedging. Point out the difference between a hedging and a speculative operation.

33. What economic argument is there in support of the future trading in the wheat markets? Define the hedging operation as conducted by an elevator company.

34. Describe the course of an order.

35. Into what two classes may pit traders be divided?

36. Describe the method of payment employed in the Board of Trade.

37. What is meant by the expression "trading on a margin"? Show how the method of "ringing out" obviates the necessity for a clearing house.

38. Why is a clearing house system necessary in connection with the Board of Trade?

39. Name the chief produce exchanges of the United States and Europe. What is the duty of the committee on arbitration? Name four rules which protect the traders.

40. What influence have the telegraph and the Atlantic cable had upon the organization of the market?

CHAPTER V

41. Why was the Manchester cotton goods exchange organized?

42. What reasons are impelling the manufacturer to strengthen his control over the market? What form of association is represented by the Central Thread Company?

43. Describe the agency method of selling. Outline the method employed by the American Tobacco Company in disposing of its product.

44. How may the method of transportation influence the system of distribution? What special cause induced the large iron and steel manufacturers to eliminate the middleman?

45. Name some factors affecting the selling methods in the textile industries. State two reasons for the strong position which the commission men hold in these trades.

46. What drawbacks has the mail-order method in the United States and England?

47. Why does not the manufacturer of sugar establish his own retail stores? What motives led the American Tobacco Company to establish retail stores? Show how a company has rapidly extended this system of selling.

48. Outline the chief reasons for the declining importance of the middleman.

CHAPTER VI

49. What part has private enterprise taken in the building up of the foreign export business?

50. How does the American manufacturer look upon industrial expositions as a means of introducing his goods in other countries?

51. Outline the methods by which a manufacturer should approach the subject of exporting.

52. Why are clearness and simplicity in foreign correspondence essential? What cautions should be observed in compiling catalogues?

53. What advantage has a graduated scale of prices

over a quoted price? What caution should be observed in quoting prices C. I. F. and F. O. B.?

54. What is the economic function of the commission man?

55. What cautions should be observed in dealing with commission houses?

56. What are the chief duties of an export commission man?

57. What encroachments are being made upon the functions of the commission house?

58. Name four methods used by manufacturers to put goods on the market.

59. What are "jobbing houses"?

60. What are the advantages to the foreign customer in dealing through a commission house? What are the advantages to the manufacturer? What is the ordinary method employed in arranging the financial settlement when goods are exported?

61. What precaution should be observed in dealing with commission houses?

62. How do manufacturers located far from the ports keep in touch with the export conditions?

CHAPTER VII

63. What is the chief function of the consular service?

64. What influence is the industrial activity of Germany exerting on our consular service?

65. What system of consular appointments was inaugurated in 1906?

66. What is the range of the salaries of consular officers?

67. What is the character of the consular reports?

Of what importance are such reports to the American foreign trade?

68. How have the consular reports helped the United States to introduce new goods into China? Why should Americans study the styles and prejudices of foreign countries?

69. What is the custom among foreigners in regard to credits?

70. Why is it important that strict attention be paid to the packing of goods for the export trade?

71. How does the government discriminate in favor of its own citizens in the matter of trade information?

72. How do the consuls aid in the protection of the customs revenue? In what direction should the consular service be extended?

CHAPTER VIII

73. In what two directions has the manufacturer attempted to reduce his costs?

74. Why is capital said to be fixed when it is invested in a manufacturing plant?

75. What important factors must be taken into consideration in predetermining business enterprise?

76. Why should a factory be placed as near as possible to the source of the raw material?

77. Why should it be near the source of power?

78. Discuss the labor market.

79. Discuss the factory's output.

80. Discuss transportation facilities and the relation to factory location.

81. Why are the physical surroundings of importance?

82. In the reorganization of an existing plant, what important considerations may arise?

83. What advantages has a country site over one in the city? Describe the storied and the scattered types of manufacturing plants.

84. What important principle in connection with future expansion should be kept in mind in designing a modern plant?

85. In providing for the transmission of electrical power within the factory how is the machinery often grouped?

86. Why should standard equipment be installed as far as possible? What kind of tools prove to be the most economical in the long run?

87. What idea should be kept prominently in view when providing for transportation within the plant?

88. Discuss the conveyance of information.

89. Make a list of the various preliminaries in preparing to manufacture a certain product.

CHAPTER IX

90. On what basis should men be selected for positions of authority?

91. Make outlines showing the various divisions into which the following functions of a manufacturing business may be divided: controlling the supply of stock, purchasing, testing, employing, selling, warehousing, transporting, maintenance, improvement, construction, executive, administration. What data should be gathered by the recording department in connection with the employment of labor? What department fixes the price at which goods can be sold to make a profit? Why is it important that the maintenance and manufacturing

departments be consulted before any extensive improvements are made in building or equipments?

92. Give a list of typical duties pertaining to the following officers: president, vice-president, secretary, treasurer, general-manager.

93. What advantages are claimed for the functional method of organization as opposed to the military method?

94. Describe the organization of the planning department.

95. What are the chief foremen connected with this department and what are their duties?

96. What are the duties of the shop bosses?

CHAPTER X

97. Make a sample form which may be used by a salesman in sending an order to the factory.

98. Why is it good business policy to keep the drafting department in close touch with the shop? Why should all drawings be OK'd by the shop foreman before they are placed in the shop?

99. In order to determine the efficiency of the tool room, to what important tests should it be subjected?

100. What advantages are there in the separation of the management from the factory in locating it in a main office at some business center or large city?

101. Does the control of a concern by the owners or by salaried managers produce the best result?

102. What is the committee system of management?

103. What is the purpose of the committees? Of what should the membership consist? Who should act as chairman of the most important committees?

104. Why should the meetings of the job bosses and

the foremen be sharp and to the point? What class of men controls the labor situation in a factory?

105. What are the fundamental problems which in one form or another should be considered by the various committees?

CHAPTER XI

106. State the principle upon which an office system should be laid out.

107. Name the various departments that must be provided for under the heading of administrative offices. What two separate kinds of work does the accounting department embrace? What other series of departments closely connected with the factory organization should be considered in planning the administrative offices? How may the committee system be applied in office management?

108. Why is the question of internal communication of great importance in planning an office system?

109. What economies are there in having standard forms?

110. What are special reports? Regular reports? What general rules should be followed in the compilation of all reports?

111. What factors should decide the selection of a person who is to make a report?

112. In general what two things should always appear when possible in a report?

113. What data should the executive have in arriving at a standard of comparison in the process of production and in the commercial department? Why is the executive report considered the most important?

114. What is the chief purpose of the report from the selling department?

115. What items will form the basis of the factory report? Why is it desirable to take averages covering a period of six months or more in comparing weekly or monthly reports obtained from the factory?

116. Construct a form which will embody the data in the factory report. (The form given for the weekly progress report will offer some suggestions.)

117. Where are the cost reports treated of?

118. What two things determine the period covered by a report?

119. Why is it important that immediate and definite action should be taken on all reports?

CHAPTER XII

120. Why do men have a standard weight, a standard yardstick, a standard time, etc.?

121. Why does a manufacturer wish to establish his production on the market as a standard of its kind? Why does he strive to establish standards for as many activities and processes as possible in the factory?

122. Provided that the inspection department is efficient, why is the determination of a standard time of prime importance?

123. What is betterment work?

124. What must be taken into consideration in determining wage systems?

125. What are the most prominent systems of pay in the United States? State the condition under which each has been proved to be especially successful.

126. If you had a high-grade shop where the work was standardized and the men well-trained and the rate

of production high, what system of payment would be likely to get the most out of the costly machinery and tools?

127. Under the efficiency system, how is the amount of bonus determined? What advantages has it over the Taylor system?

128. What is the importance of determining a standard time before deciding on a wage system?

CHAPTER XIII

129. What were the first steps taken preliminary to industrial betterment? Compare the conditions in the factories in England during the first half of the Nineteenth Century with present conditions.

130. What was the origin of the term "welfare institutions"? Give arguments to show that welfare institutions are of real profit to the employer of labor. Name the duties of "welfare managers."

131. What general devices should be employed against accidents and fire?

132. What is the ideal location for a factory?

133. What devices are employed for good ventilation, plenty of light and sanitation?

134. Give some specific illustrations of good sanitation and cleanliness.

135. What is the importance of providing adequate quarters for the employé's lunch hour? Give some illustrations of this in the United States and France.

136. Name some of the considerations which come under the heading of recreation.

137. What advantages are gained by employers who provide some sort of educational facilities for their employés? Give illustrations.

138. What are the general effects of welfare institutions?

139. Give illustrations of the suggestion system. What is necessary for the effectiveness of the system?

PART II: BUSINESS ENGLISH

CHAPTER I

1. What was the ancient status of business correspondence?

2. What was the chief fault of the old methods of instruction in writing business letters?

3. From what cause did the improvement in methods arise?

4. What is the main purpose in business correspondence? How does this differ from the purposes of other kinds of English composition?

5. What is the test of a good business letter? For what reason do many letters fail to meet this test?

6. What are the two processes usually necessary in writing a successful business letter? Distinguish between them. Which is the more important and why?

7. What are the disadvantages of the correspondent compared with the salesman? What are his advantages?

8. Why should a man not "talk" in a business letter? In what respects should a good business letter resemble talk? How do letters frequently lose the power of personality?

9. State briefly the methods necessary in learning to write good business letters?

CHAPTER II

10. What are the "Five C's of Business Correspondence"?

11. What is meant by clearness?

12. Distinguish between vagueness and obscurity. What are the remedies for each?

13. What is ambiguity? What is the remedy for this?

14. How may clearness be obtained?

15. Why is correctness necessary in a business letter?

16. What is correctness? Discuss the nature of usage.

17. Why should a business letter be concise?

18. How does conciseness differ from brevity?

19. What are the merits of the example given?

20. Why is politeness necessary in a letter? When and how is it most frequently neglected? Why is it not well to say "Thanking you in advance for the favor"?

21. How does courtesy differ from politeness?

22. What is meant by the "you" attitude? What is its value?

23. What is meant by character in a business letter?

24. How do some writers mistakenly attempt to secure it?

25. Why should stereotyped expressions be avoided? How can a writer secure character?

26. What is the value of securing character?

CHAPTER III

27. What are the most important principles of construction in a business letter? How should they be used?

28. What does the principle of unity demand of the whole letter?

29. How may a letter be tested for unity?

30. How is the principle of unity applied in the paragraphs of a letter? What is a helpful means in securing it?

31. How is the principle of unity applied in sentences?

32. What does the principle of coherence demand of the whole letter? Explain the two processes used in securing it?

33. How is the principle of coherence applied in paragraphs? What is the parallel construction and what is its value? What kind of correctives are most helpful?

34. How is the principle of coherence applied in sentences?

35. What does the principle of emphasis demand of a letter? Why should a letter not begin with a mere acknowledgment of the receipt of a former letter? How should a letter begin?

36. Why should a long complimentary close be avoided? Why is it weak to say at the close of a letter, "Hoping to receive an early and favorable reply"? How should a letter end?

37. How is the principle of emphasis applied in paragraphs?

38. How is the principle of emphasis applied in sentences? What weak construction should especially be avoided?

CHAPTER IV

39. Why are few rules valuable in writing business letters?

40. What is meant by concrete facts? How are they helpful?
41. What is meant by concrete language?
42. Why should pretentious language be avoided?
43. Distinguish between colloquialisms and slang.
44. Why should long sentences be avoided?
45. How may monotony and awkwardness be avoided?

CHAPTER V

46. What is the most important quality to be sought in the mechanical forms of the letter?
47. What should be the size, color, and texture of the stationery used?
48. What are the chief requirements of a good letter-head? Why is advertising in a letter-head objectionable?
49. What color of ink should be used?
50. Where should the written heading of a letter be placed? What should it include? What is the correct order?
51. Where should the inside address be placed? What should it include? What titles should be used?
52. What are the correct forms of the salutation?
53. What is the correct arrangement of the body of the letter?
54. What are the correct forms of the complimentary close?
55. What are the requirements of the signature?
56. For what purpose should a postscript be used? How should a letter be folded and placed in the envelope?
57. What are the requirements of the envelope?

CHAPTER VI

58. What qualities are most important in routine letters? How should an inquiry be written? Write an inquiry.

59. What are the six requirements in an order for goods?

60. Write a correct order for goods.

61. In what forms should money be enclosed in a letter?

62. What is a hurry-up letter? What should it include and in what order? What is the best tone to use?

63. Write a hurry-up letter.

CHAPTER VII

64. To what three classes of people are collection letters usually sent? How do the letters sent to these differ?

65. Which of the Five C's may usually be disregarded in collection letters? Why?

66. What is the nature of the first letter? Write one.

67. What is the nature of the second letter? On what principle should the request for payment usually be based? Write second letters to each of the three classes referred to in section 64.

68. What is the nature of the third letter? Write one.

CHAPTER VIII

69. What quality is especially important in an application for a position? How should an answer to an advertisement be written? Write one.

70. What kinds of evidence are useful in applying for a position?

71. Write an application for a position.

72. What should be included in a recommendation?

What are the two kinds of recommendations?

73. Write an example of each.

CHAPTER IX

74. What is the main purpose in answering a complaint?

75. In writing a complaint what quality is especially to be sought? How should the complaint be written? Write one.

76. How may ordinary complaints be answered?

77. Point out the faults in the example given. Write a substitute.

78. How should complaints of poor quality be answered? Write such a letter.

79. How should unjust complaints be answered? Write such a letter.

80. How should a letter in answer to an inadequate order be written? Write one.

CHAPTER X

81. What are the steps usually necessary in a successful sales-letter?

82. How may the reader be shown his need?

83. How may his emotions be appealed to?

84. To what should a sales-letter on machinery make its appeal?

85. What is meant by the talking-point? How should this be used?

86. How may your arguments be proved?
87. What is the difference in value and use between tests and testimony?
88. What is the last step in a sales-letter? How is this accomplished?
89. Write a sales-letter for a piece of real estate; for a piece of machinery.
90. How do sales-letters for ideas differ from those for things?
91. Write a sales-letter for some idea.

CHAPTER XI

92. What is the purpose of a follow-up letter? What should be included in it?
93. What are frequent but undesirable ways to begin?
94. What kind of beginning is best?
95. What kinds of new material may be given in a follow-up letter? How much should be given? What is the last argument to be used?
96. How should a follow-up end?
97. Write a series of three follow-ups.

CHAPTER XII

98. How does an argumentative letter differ from the ordinary sales-letter?
99. How can an objection be minimized?
100. How can it be met? How should the argument be backed up?
101. Write an answer to an objection, or an argumentative letter.

CHAPTER XIII

102. How should a letter to a farmer differ from one to a business man? What frequent error should be avoided?

103. Write a sales-letter to a farmer.

104. How should a letter to a lady differ from one to a business man in form and in language?

105. Write a sales-letter to a lady.

106. What should be the nature of a letter to a professional man? Write one.

CHAPTER XIV

107. What are official letters? On what kind of stationery are they usually written?

108. What are formal official letters? How does this mechanical form differ from that of ordinary business letters?

109. How should the titles Reverend, Sir, and Honorable be used? What titles are used in addressing the important federal officers?

110. Write a formal official letter.

111. In what respects do informal official letters differ from the formal?

112. Write an informal official letter.

CHAPTER XV

113. What are the chief uses of the comma?

114. When should a period be used?

115. When should the semicolon and colon be used? 

116. Name some common misuses of words.

PART III: TRANSPORTATION

CHAPTER I

1. Why is the relation of transportation to industry so close? Why is friction between railroads and the public so common?

2. What was the nature of early public regulation of railroads in Great Britain?

3. How did early public regulation of railroads in the United States differ from contemporaneous regulation in Great Britain? What was the basic reason for this difference?

4. How were the early American railroads aided by the public?

5. In what sense is a railroad a public servant? Should a distinction as to extent of public regulation be made between those railroads that have received aid and those railroads that have not received aid from the public?

6. What is the chief argument advanced to justify government regulation of private or semi-private enterprises?

7. How far do modern governments go in regulating private enterprises?

8. Discuss briefly the chief practical objection to government regulation of railway enterprises.

9. Sum up the main facts and principles involved in the present relations between the government and the railroads.

CHAPTER II

10. What basic factors determined the location of settlements in the United States up to about the year 1840?

11. What has been the effect of railroads on the movement of population in the United States?

12. What universal characteristics of the promotion and financing of early railroads in all countries can you mention?

13. What important difference existed between the character of early railway construction in Great Britain and its character in the United States? In what respects, if any, are American railroads to-day inferior to the railroads of other countries?

14. Discuss briefly two important economic effects that followed the introduction of railways in this country.

15. Mention the ten groups into which American railways are divided for statistical purposes by the Interstate Commerce Commission. Mention as many railway lines and systems as you can in each group.

CHAPTER III

16. What two reasons can you give for the magnitude of the capital and the operations of railroad companies in all countries?

17. Compare railroads with manufacturing enterprises in respect to the proportionate amount of labor required. What general influence have railroads exerted upon the wages of workingmen?

18. How do the earnings of railroads compare in general with the earnings of manufacturing enterprises in respect to fluctuations?

19. Can the capital invested in railroads readily be withdrawn? How does the railway compare in this respect with an ordinary commercial enterprise?

20. Are railroads monopolies? Give reasons for your answer.

CHAPTER IV

21. Where and how are the funds required from time to time by railroad companies generally secured?

22. What underlying economic factors determine the amount and the safety of the return on capital invested in railroads?

23. Ought railroad rates to be based directly or indirectly on the amount of capital invested in railroads or on a physical valuation of railroad property? What in general have been the relations between the movements of average earnings, capital and expenses on American railroads since 1890?

CHAPTER V

24. What has been the course of the movement toward railway consolidation in the United States? What has been the public attitude toward the movement and is that attitude justified? What are the chief advantages and dangers of railway consolidation?

25. What are fast freight lines? Why were they organized? What is their present status?

CHAPTER VI

26. What is meant by freight classification? What is its origin?

27. Discuss each of the principal factors that are considered by railway traffic managers in fixing the classification of any article.

28. What are the three principal classifications now in use in the United States? What is the chief argument in favor of the establishment of a uniform classification of freight for the whole United States? What are the characteristic features of the Canadian joint classification?

CHAPTER VII

29. Is any single scientific principle always followed in fixing freight rates? What five principles of rate fixation are theoretically possible? In what sense is it true that a railroad rate is analogous to a tax?

30. Would it be practicable to base freight rates on the cost to the railroad of transporting goods? Give reasons for your answer.

31. Would it be practicable and is it customary to base freight rates directly on the value of the goods transported?

32. Would it be practicable to base freight rates on the value of the service rendered to each shipper?

33. What is the origin of the customary statement that railway freight rates are based on the principle of "charging what the traffic will bear"? Is this statement correct?

34. What are the factors that in actual practice determine freight rates? What are the upper and lower limits between which the rate must be fixed?

35. Is it practicable to adjust rates in such a manner as to please and benefit all the interests concerned? Discuss briefly the reasons for your answer.

36. What are the chief elements that enter into and determine the cost to the railroad of transporting any given article? Does the total cost of transporting an article bear any necessary or usual relation to the rate fixed for that article?

37. May the cost of transportation on a railroad be said to vary directly with the distance? Would this statement be true if terminal charges were first deducted? Assuming that the cost per mile for transporting any given article is the same whether it be hauled a short distance or a long distance, why do railroad traffic managers invariably make special efforts and special concessions in order to secure long distance traffic? What is a "flat" rate? Why are rates not quoted "flat" on short distance traffic?

CHAPTER VIII

38. What is the general influence of railroad rates on the level of prices? Why is it that the prices of many articles are not apparently at all affected by changes in freight rates on those articles?

39. What is the influence of changes in the prices of goods on the freight rates fixed for those goods? What is the usual and natural effect of a change in the general level of prices on the general level of freight rates?

CHAPTER IX

40. What are the two important classes of "discriminations"? Why did railroad companies in the United States formerly grant preferential rates and give rebates so freely? Why has this practice of late

years been discontinued? Do English and American laws absolutely forbid all forms of discriminations?

41. What is the "long and short haul" clause of the Interstate Commerce Act? How has the Interstate Commerce Commission interpreted this clause? How has it been interpreted by the United States Supreme Court?

42. What is meant by a "differential"? Why do certain Atlantic ports enjoy differentials below the rates to and from New York City? What was the latest decision of the Interstate Commerce Commission as to these differentials? Give another example of a differential rate.

43. What are the main factors that a manufacturer or other shipper should take into account in an examination of his situation as regards transportation and rates? Why are traffic experts now so generally employed by large shippers and what are their functions?

CHAPTER X

44. Compare the extent of governmental regulation of railways in America and in European countries.

45. In what respects has the service of American railways been much improved within recent years? What are demurrage charges and what are the underlying reasons for their existence? In what respect may the efficiency of American railroad management be criticised?

46. Is the proportion of accidents on American railroads to the total number of persons carried increasing or decreasing?

47. What are the main characteristics of governmental regulation of railroads in Canada? What two

questions have recently been given particular attention by the Canadian Board of Railway Commissioners?

CHAPTER XI

48. What have been the causes and effects of nationalization of railroads in Germany? In Italy?

49. Discuss briefly the experiences of the British Colonies in connection with state ownership of railways.

50. What historical reasons explain the fact that government ownership of railways has never been attempted in Great Britain?

51. What historical reasons explain the fact that government ownership of railways has never been attempted in the United States?

52. What factors are tending to bring about nationalization of railways in all modern countries? Are these factors in your judgment likely to achieve nationalization?

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